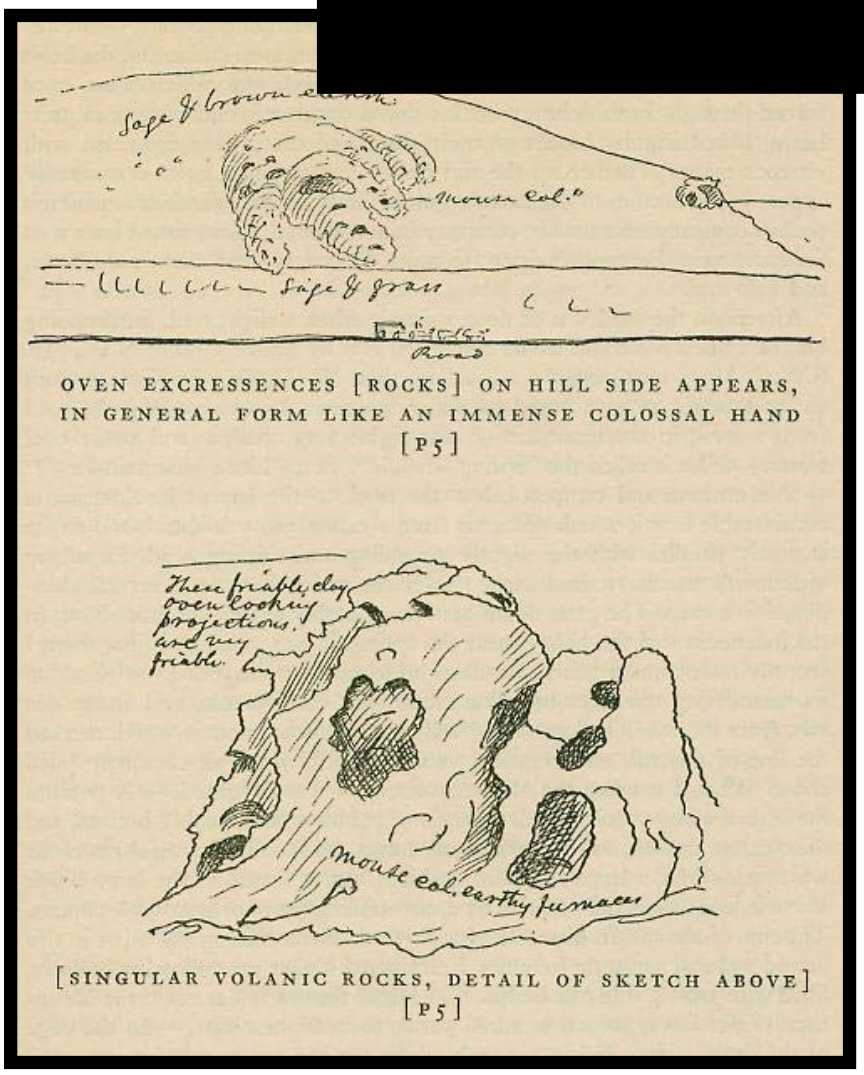
Appendices



Bruff's 1849 sketch of "Singular Volcanic Rock" in High Rock Canyon

Photo Credit *

Appendix A: NCA and Wilderness Acts

Black Rock Desert-High Rock Canyon Emigrant Trails National Conservation Area Act of 2000

[Page 114 STAT. 2763 Page 114, (U.S. Statutes at Large, page 114 ff.), Public Law 106-554]
Signed into Law December 21, 2000
as Amended November 6, 2001

AN ACT

To establish the Black Rock Desert-High Rock Canyon Emigrant Trails National Conservation Area, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the `Black Rock Desert-High Rock Canyon Emigrant Trails National Conservation Area Act of 2000'.

SEC. 2. FINDINGS.

The Congress finds the following:

(1) The areas of northwestern Nevada known as the Black Rock Desert and High Rock Canyon contain and surround the last nationally significant, untouched segments of the historic California emigrant Trails, including wagon ruts, historic inscriptions, and a wilderness landscape largely unchanged since the days of the pioneers.

(2) The relative absence of development in the Black Rock Desert and high Rock Canyon areas from emigrant times to the present day offers a unique opportunity to capture the terrain, sights, and conditions of the overland trails as they were experienced by the emigrants and to make available to both present and future generations of Americans the opportunity of experiencing emigrant conditions in an unaltered setting.

(3) The Black Rock Desert and High Rock Canyon areas are unique segments of the Northern Great Basin and contain broad representation of the Great Basin's land forms and plant and animal species, including golden eagles and other birds of prey, sage grouse, mule deer, pronghorn antelope, bighorn sheep, free roaming horses and burros, threatened fish and sensitive plants.

(4) The Black Rock-High Rock region contains a number of cultural and natural resources that have been declared eligible for National Historic Landmark and Natural Landmark status, including a portion of the 1843-44 John Charles Fremont exploration route, the site of the death of Peter Lassen, early military facilities, and examples of early homesteading and mining.

(5) The archeological, paleontological, and geographical resources of the Black Rock-High Rock region include numerous prehistoric and historic Native American sites, wooly mammoth sites, some of the largest natural potholes of North America, and a remnant dry Pleistocene lakebed (playa) where the curvature of the Earth may be observed.

(6) The two large wilderness mosaics that frame the conservation area offer exceptional opportunities for solitude and serve to protect the integrity of the viewshed of the historic emigrant trails.

(7) Public lands in the conservation area have been used for domestic livestock grazing for over a century, with resultant benefits to community stability and contributions to the local and State economies. It has not been demonstrated that continuation of this use would be incompatible with appropriate protection and sound management of the resource values of these lands; therefore, it is expected that such grazing will continue in accordance with the management plan for the conservation area and other applicable laws and regulations.

(8) The Black Rock Desert playa is a unique natural resource that serves as the primary destination for the majority of visitors to the conservation area, including visitors associated with large-scale permitted events. It is expected that such permitted events will continue to be administered in accordance with the management plan for the conservation area and other applicable laws and regulations.

SEC. 3. DEFINITIONS.

As used in this Act:

(1) The term `Secretary' means the Secretary of the Interior.

(2) The term `public lands' has the meaning stated in section 103(e) of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1702(e)).

(3) The term `conservation area' means the Black Rock Desert-High Rock Canyon Emigrant Trails National Conservation Area established pursuant to section 4 of this Act.

SEC. 4. ESTABLISHMENT OF THE CONSERVATION AREA.

(a) ESTABLISHMENT AND PURPOSES- In order to conserve, protect, and enhance for the benefit and enjoyment of present and future generations the unique and nationally important historical, cultural, paleontological, scenic, scientific, biological, educational, wildlife, riparian, wilderness, endangered species, and recreational values and resources associated with the Applegate-Lassen and Nobles Trails corridors and surrounding areas, there is hereby established the Black Rock Desert-High Rock Canyon Emigrant Trails National Conservation Area in the State of Nevada.

(b) AREAS INCLUDED- The conservation area shall consist of approximately 797,100 acres of public lands as generally depicted on the map entitled ‘Black Rock Desert Emigrant Trail National Conservation Area' and dated October 3, 2001.

(c) MAPS AND LEGAL DESCRIPTION- As soon as practicable after the date of the enactment of this Act, the Secretary shall submit to Congress a map and legal description of the conservation area. The map and legal description shall have the same force and effect as if included in this Act, except the Secretary may correct clerical and typographical errors in such map and legal description. Copies of the map and legal description shall be on file and available for public inspection in the appropriate offices of the Bureau of Land Management.

SEC. 5. MANAGEMENT.

(a) MANAGEMENT- The Secretary, acting through the Bureau of Land Management, shall manage the conservation area in a manner that conserves, protects and enhances its resources and values, including those resources and values specified in subsection 4(a), in accordance with this Act, the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.), and other applicable provisions of law.

(b) Access-

(1) IN GENERAL- The Secretary shall maintain adequate access for the reasonable use and enjoyment of the conservation area.

(2) PRIVATE LAND- The Secretary shall provide reasonable access to privately owned land or interests in land within the boundaries of the conservation area.

(3) EXISTING PUBLIC ROADS- The Secretary is authorized to maintain existing public access within the boundaries of the conservation area in a manner consistent with the purposes for which the conservation area was established.

(c) Uses-

(1) IN GENERAL- The Secretary shall only allow such uses of the conservation area as the Secretary finds will further the purposes for which the conservation area is established.

(2) OFF-HIGHWAY VEHICLE USE- Except where needed for administrative purposes or to respond to an emergency, use of motorized vehicles in the conservation area shall be permitted only on roads and trails and in other areas designated for use of motorized vehicles as part of the management plan prepared pursuant to subsection (e).

(3) PERMITTED EVENTS- The Secretary may continue to permit large-scale events in defined, low impact areas of the Black Rock Desert playa in the conservation area in accordance with the management plan prepared pursuant to subsection (e).

(d) HUNTING, TRAPPING, AND FISHING- Nothing in this Act shall be deemed to diminish the jurisdiction of the State of Nevada with respect to fish and wildlife management, including regulation of hunting and fishing, on public lands within the conservation area.

(e) MANAGEMENT PLAN- Within three years following the date of enactment of this Act, the Secretary shall develop a comprehensive resource management plan for the long-term protection and management of the conservation area. The plan shall be developed with full public participation and shall describe the appropriate uses and management of the conservation area consistent with the provisions of this Act. The plan may incorporate appropriate decisions contained in any current management or activity plan for the area and may use information developed in previous studies of the lands within or adjacent to the conservation area.

(f) GRAZING- Where the Secretary of the Interior currently permits livestock grazing in the conservation area, such grazing shall be allowed to continue subject to all applicable laws, regulations, and executive orders.

(g) VISITOR SERVICE FACILITIES- The Secretary is authorized to establish, in cooperation with other public or private entities as the Secretary may deem appropriate, visitor service facilities for the purpose of providing information about the historical, cultural, ecological, recreational, and other resources of the conservation area.

(h) ROAD MAINTENANCE- Within the conservation area the Secretary may permit the use of gravel pits for the maintenance of roads within the Materials Act of 1947 (30 U.S.C. 601 *et seq*.) to the extent consistent with this Act and subject to such regulations, policies, and practices as the Secretary considers necessary.

SEC. 6. WITHDRAWAL.

(a) IN GENERAL- Subject to valid existing rights, all Federal lands within the conservation area and all lands and interests therein which are hereafter acquired by the United States are hereby withdrawn from all forms of entry, appropriation, or disposal under the public land laws, from location, entry, and patent under the mining laws, from operation of the mineral leasing and geothermal leasing laws and from the minerals materials laws and all amendments thereto.

SEC. 7. NO BUFFER ZONES.

The Congress does not intend for the establishment of the conservation area to lead to the creation of protective perimeters or buffer zones around the conservation area. The fact that there may be activities or uses on lands outside the conservation area that would not be permitted in the conservation area shall not preclude such activities or uses on such lands up to the boundary of the conservation area consistent with other applicable laws.

SEC. 8. WILDERNESS.

(a) DESIGNATION- In furtherance of the purposes of the Wilderness Act of 1964 (16 U.S.C. 1131 et seq.), the following lands in the State of Nevada are designated as wilderness, and, therefore, as components of the National Wilderness Preservation System:

(1) Certain lands in the Black Rock Desert Wilderness Study Area comprised of approximately 315,700 acres, as generally depicted on a map entitled 'Black Rock Desert Wilderness' and dated October 3, 2001, and which shall be known as the Black Rock Desert Wilderness.

(2) Certain lands in the Pahute Peak Wilderness Study Area comprised of approximately 57,400 acres, as generally depicted on a map entitled 'Pahute Peak Wilderness' and dated October 3, 2001, and which shall be known as the Pahute Peak Wilderness.

(3) Certain lands in the North Black Rock Range Wilderness Study Area comprised of approximately 30,800 acres, as generally depicted on a map entitled 'North Black Rock Range Wilderness' and dated October 3, 2001, and which shall be known as the North Black Rock Range Wilderness.

(4) Certain lands in the East Fork High Rock Canyon Wilderness Study Area comprised of approximately 52,800 acres, as generally depicted on a map entitled 'East Fork High Rock Canyon Wilderness' and dated October 3, 2001, and which shall be known as the East Fork High Rock Canyon Wilderness.

(5) Certain lands in the High Rock Lake Wilderness Study Area comprised of approximately 59,300 acres, as generally depicted on a map entitled 'High Rock Lake Wilderness' and dated October 3, 2001, and which shall be known as the High Rock Lake Wilderness.

(6) Certain lands in the Little High Rock Canyon Wilderness Study Area comprised of approximately 48,700 acres, as generally depicted on a map entitled 'Little High Rock Canyon Wilderness' and dated October 3, 2001, and which shall be known as the Little High Rock Canyon Wilderness.

(7) Certain lands in the High Rock Canyon Wilderness Study Area and Yellow Rock Canyon Wilderness Study Area comprised of approximately 46,600 acres, as generally depicted on a map entitled 'High Rock Canyon Wilderness' and dated October 3, 2001, and which shall be known as the High Rock Canyon Wilderness.

(8) Certain lands in the Calico Mountains Wilderness Study Area comprised of approximately 65,400 acres, as generally depicted on a map entitled 'Calico Mountains Wilderness' and dated October 3, 2001, and which shall be known as the Calico Mountains Wilderness.

(9) Certain lands in the South Jackson Mountains Wilderness Study Area comprised of approximately 56,800 acres, as generally depicted on a map entitled 'South Jackson Mountains Wilderness' and dated October 3, 2001, and which shall be known as the South Jackson Mountains Wilderness.

(10) Certain lands in the North Jackson Mountains Wilderness Study Area comprised of approximately 24,000 acres, as generally depicted on a map entitled 'North Jackson Mountains Wilderness' and dated October 3, 2001, and which shall be known as the North Jackson Mountains Wilderness.

(b) ADMINISTRATION OF WILDERNESS AREAS- Subject to valid existing rights, each wilderness area designated by this Act shall be administered by the Secretary in accordance with the provisions of the Wilderness Act, except that any reference in such provisions to the effective date of the Wilderness Act shall be deemed to be a reference to the date of enactment of this Act and any reference to the Secretary of Agriculture shall be deemed to be a reference to the Secretary of the Interior.

(c) MAPS AND LEGAL DESCRIPTION- As soon as practicable after the date of the enactment of this Act, the Secretary shall submit to Congress a map and legal description of the wilderness areas designated under this Act. The map and legal description shall have the same force and effect as if included in this Act, except the Secretary may correct clerical and typographical errors in such map and legal description. Copies of the map and legal description shall be on file and available for public inspection in the appropriate offices of the Bureau of Land Management.

(d) GRAZING- Within the wilderness areas designated under subsection (a), the grazing of livestock, where established prior to the date of enactment of this Act, shall be permitted to continue subject to such reasonable regulations, policies, and practices as the Secretary deems necessary, as long as such regulations, policies, and practices fully conform with and implement the intent of Congress regarding grazing in such areas as such intent is expressed in the Wilderness Act and section 101(f) of Public Law 101-628.

(e) HUNTING, TRAPPING, AND FISHING-

(1) IN GENERAL- Nothing in this Act diminishes the jurisdiction of the State of Nevada with respect to fish and wildlife management, including regulation of hunting and fishing on public land in the areas designated as wilderness under subsection (a).

(2) APPLICABLE LAW- Any action in the areas designated as wilderness under subsection (a) shall be consistent with the Wilderness Act (16 U.S.C. 1131 *et seq*.).

(f) WILDLAND FIRE PROTECTION- Nothing in this Act or the Wilderness Act (16 U.S.C. 1131 *et seq*.) precludes a Federal, State, or local agency from conducting wildland fire management operations (including prescribed burns) within the areas designated as wilderness under subsection (a), subject to any conditions that the Secretary considers appropriate.

(g) WILDERNESS STUDY RELEASE- Congress-

(1) finds that the parcels of land in the wilderness study areas referred to in subsection (a) that are not designated as wilderness in subsection (a) have been adequately studied for wilderness designation under section 603 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1782); and

(2) declares that those parcels are no longer subject to the requirement of subsection (c) of that section pertaining to the management of wilderness study areas in a manner that does not impair the suitability of such areas for preservation as wilderness.

SEC. 9. AUTHORIZATION OF APPROPRIATIONS.

There is hereby authorized to be appropriated such sums as may be necessary to carry out the provisions of this Act.

Passed the Senate October 5, 2000.
Passed the House of Representatives December 18, 2000
Signed by the President December 21, 2000
Amended November 6, 2001

National Wilderness Preservation System

Public Law 88-577
88th Congress, S. 4
September 3, 1964

An Act

To establish a National Wilderness Preservation System for the permanent good of the whole people, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

Short Title

Section 1. This Act may be cited as the "Wilderness Act".

Wilderness System Established Statement of Policy

Sec. 2. (a) In order to assure that an increasing population, accompanied by expanding settlement and growing mechanization, does not occupy and modify all areas within the United States and its possessions, leaving no lands designated for preservation and protection in their natural condition, it is hereby declared to be the policy of the Congress to secure for the American people of present and future generations the benefits of an enduring resource of wilderness. For this purpose there is hereby established a National Wilderness Preservation System to be composed of federally owned areas designated by Congress as "wilderness areas", and these shall be administered for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness; and no Federal lands shall be designated as "wilderness areas" except as provided for in this Act or by a subsequent Act.

(b) The inclusion of an area in the National Wilderness Preservation System notwithstanding, the area shall continue to be managed by the Department and agency having jurisdiction thereover immediately before its inclusion in the National Wilderness Preservation System unless otherwise provided by Act of Congress. No appropriation shall be available for the payment of expenses or salaries for the administration of the National Wilderness Preservation System as a separate unit nor shall any appropriations be available for additional personnel stated as being required solely for the purpose of managing or administering areas solely because they are included within the National Wilderness Preservation System.

Definition of Wilderness

(c) A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean in this Act an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of

recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

National Wilderness Preservation System -- Extent of System

Sec. 3. (a) All areas within the national forests classified at least 30 days before the effective date of this Act by the Secretary of Agriculture or the Chief of the Forest Service as "wilderness", "wild", or "canoe" are hereby designated as wilderness areas. The Secretary of Agriculture shall --

(1) Within one year after the effective date of this Act, file a map and legal description of each wilderness area with the Interior and Insular Affairs Committees of the United States Senate and the House of Representatives, and such descriptions shall have the same force and effect as if included in this Act: Provided, however, That correction of clerical and typographical errors in such legal descriptions and maps may be made.

(2) Maintain, available to the public, records pertaining to said wilderness areas, including maps and legal descriptions, copies of regulations governing them, copies of public notices of, and reports submitted to Congress regarding pending additions, eliminations, or modifications. Maps, legal descriptions, and regulations pertaining to wilderness areas within their respective jurisdictions also shall be available to the public in the offices of regional foresters, national forest supervisors, and forest rangers.

(b) The Secretary of Agriculture shall, within ten years after the enactment of this Act, review, as to its suitability or nonsuitability for preservation as wilderness, each area in the national forests classified on the effective date of this Act by the Secretary of Agriculture or the Chief of the Forest Service as "primitive" and report his findings to the President. The President shall advise the United States Senate and House of Representatives of his recommendations with respect to the designation as "wilderness" or other reclassification of each area on which review has been completed, together with maps and a definition of boundaries. Such advice shall be given with respect to not less than one-third of all the areas now classified as "primitive" within three years after the enactment of this Act, not less than two-thirds within seven years after the enactment of this Act, and the remaining areas within ten years after the enactment of this Act. Each recommendation of the President for designation as "wilderness" shall become effective only if so provided by an Act of Congress. Areas classified as "primitive" on the effective date of this Act shall continue to be administered under the rules and regulations affecting such areas on the effective date of this Act until Congress has determined otherwise. Any such area may be increased in size by the President at the time he submits his recommendation to the Congress by not more than five thousand acres with no more than one thousand two hundred and eighty acres of such increase in any one compact unit; if it is proposed to increase the size of any such area by more than five thousand acres or by more than one thousand two hundred and eighty acres in any one compact unit the increase in size shall not become effective until acted upon by Congress. Nothing herein contained shall limit the President in proposing, as part of his recommendations to Congress, the alteration of existing boundaries of primitive areas or recommending the addition of any contiguous area of national forest lands predominantly of wilderness value. Not withstanding any other provisions of this Act, the Secretary of Agriculture may complete his review and delete such area as may be necessary, but not to exceed seven thousand acres, from the southern tip of the Gore Range-Eagles Nest Primitive Area, Colorado, if the Secretary determines that such action is in the public interest.

(c) Within ten years after the effective date of this Act the Secretary of the Interior shall review every roadless area of five thousand contiguous acres or more in the national parks, monuments and other units of the national park system and every such area of, and every roadless island within, the national wildlife refuges and game ranges, under his jurisdiction on the effective date of this Act and shall report to the President his recommendation as to the suitability or nonsuitability of each such area or island for preservation as wilderness. The President shall advise the President of the Senate and the Speaker of the House of Representatives of his

recommendation with respect to the designation as wilderness of each such area or island on which review has been completed, together with a map thereof and a definition of its boundaries. Such advice shall be given with respect to not less than one-third of the areas and islands to be reviewed under this subsection within three years after enactment of this Act, not less than two-thirds within seven years of enactment of this Act, and the remainder within ten years of enactment of this Act. A recommendation of the President for designation as wilderness shall become effective only if so provided by an Act of Congress. Nothing contained herein shall, by implication or otherwise, be construed to lessen the present statutory authority of the Secretary of the Interior with respect to the maintenance of roadless areas within units of the national park system.

(d) (1) The Secretary of Agriculture and the Secretary of the Interior shall, prior to submitting any recommendations to the President with respect to the suitability of any area for preservation as wilderness--

(A) give such public notice of the proposed action as they deem appropriate, including publication in the Federal Register and in a newspaper having general circulation in the area or areas in the vicinity of the affected land;

(B) hold a public hearing or hearings at a location or locations convenient to the area affected. The hearings shall be announced through such means as the respective Secretaries involved deem appropriate, including notices in the Federal Register and in newspapers of general circulation in the area: Provided, That if the lands involved are located in more than one State, at least one hearing shall be held in each State in which a portion of the land lies;

(C) at least thirty days before the date of a hearing advise the Governor of each State and the governing board of each county, or in Alaska the borough, in which the lands are located, and Federal departments and agencies concerned, and invite such officials and Federal agencies to submit their views on the proposed action at the hearing or by not later than thirty days following the date of the hearing.

(d)(2) Any views submitted to the appropriate Secretary under the provisions of (1) of this subsection with respect to any area shall be included with any recommendations to the President and to Congress with respect to such area.

(e) Any modification or adjustment of boundaries of any wilderness area shall be recommended by the appropriate Secretary after public notice of such proposal and public hearing or hearings as provided on subsection (d) of this section. The proposed modification or adjustment shall then be recommended with map and description thereof to the President. The President shall advise the United States Senate and the House of Representatives of his recommendations with respect to such modification or adjustment and such recommendations shall become effective only on the same manner as provided for in subsections (b) and (c) of this section.

Use of Wilderness Areas

Sec. 4. (a) The purposes of this Act are hereby declared to be within and supplemental to the purposes for which national forests and units of the national park and national wildlife refuge systems are established and administered and --

(1) Nothing in this Act shall be deemed to be in interference with the purpose for which national forests are established as set forth in the Act of June 4, 1897 (30 Stat. 11), and the Multiple Use Sustained-Yield Act of June 12, 1960 (74 Stat. 215).

(2) Nothing in this Act shall modify the restrictions and provisions of the Shipstead-Nolan Act (Public Law 539, Seventy-first Congress, July 10, 1930; 46 Stat. 1020),the Thye-Blatnik Act (Public Law 733, Eightieth Congress, June 22, 1948; 62 Stat. 568), and the Humphrey-Thye-Blatnik-Andresen Act (Public Law 607,

Eighty-fourth Congress, June 22.1965; 70 Stat. 326), as applying to the Superior National Forest or the regulations of the Secretary of Agriculture.

(3) Nothing in this Act shall modify the statutory authority under which units of the national park system are created. Further, the designation of any area of any park, monument, or other unit of the national park system as a wilderness area pursuant to this Act shall in no manner lower the standards evolved for the use and preservation of such park, monument, or other unit of the national park system in accordance with the Act of August 25, 1916, the statutory authority under which the area was created, or any other Act of Congress which might pertain to or affect such area, including, but not limited to, the Act of June 8, 1906 (34 Stat. 225; 16 U.S.C. 432 et seq.); section 3(2) of the Federal Power Act (16 U.S.C. 796 (2)); and the Act of August 21,1935 (49 Stat. 666; 16 U.S.C. 461 et seq.).

(b) Except as otherwise provided in this Act, each agency administering any area designated as wilderness shall be responsible for preserving the wilderness character of the area and shall so administer such area for such other purposes for which it may have been established as also to preserve its wilderness character. Except as otherwise provided in this Act, wilderness areas shall be devoted to the public purposes of recreational, scenic, scientific, educational, conservation, and historical use.

Prohibition of Certain Uses

(c) Except as specifically provided for in this Act, and subject to existing private rights, there shall be no commercial enterprise and no permanent road within any wilderness area designated by this Act and, except as necessary to meet minimum requirements for the administration of the area for the purpose of this Act (including measures required in emergencies involving the health and safety of persons within the area), there shall be no temporary road, no use of motor vehicles, motorized equipment or motorboats, no landing of aircraft, no other form of mechanical transport, and no structure or installation within any such area.

Special Provisions

(d) The following special provisions are hereby made:

(1) Within wilderness areas designated by this Act the use of aircraft or motorboats, where these uses have already become established, may be permitted to continue subject to such restrictions as the Secretary of Agriculture deems desirable. In addition, such measures may be taken as may be necessary in the control of fire, insects, and diseases, subject to such conditions as the Secretary deems desirable.

(2) Nothing in this Act shall prevent within national forest wilderness areas any activity, including prospecting, for the purpose of gathering information about mineral or other resources, if such activity is carried on in a manner compatible with the preservation of the wilderness environment. Furthermore, in accordance with such program as the Secretary of the Interior shall develop and conduct in consultation with the Secretary of Agriculture, such areas shall be surveyed on a planned, recurring basis consistent with the concept of wilderness preservation by the Geological Survey and the Bureau of Mines to determine the mineral values , if any, that may be present; and the results of such surveys shall be made available to the public and submitted to the President and Congress.

(3) Not withstanding any other provisions of this Act, until midnight December 31, 1983, the United States mining laws and all laws pertaining to mineral leasing shall, to the extent as applicable prior to the effective date of this Act, extend to those national forest lands designated by this Act as "wilderness areas"; subject, however, to such reasonable regulations governing ingress and egress as may be prescribed by the Secretary of Agriculture consistent with the use of the land for mineral location and development and exploration, drilling, and production, and use of land for transmission lines, waterlines, telephone lines, or facilities necessary in

exploring, drilling, producing, mining, and processing operations, including where essential the use of mechanized ground or air equipment and restoration as near as practicable of the surface of the land disturbed in performing prospecting, location, and , in oil and gas leasing, discovery work, exploration, drilling, and production, as soon as they have served their purpose. Mining locations lying within the boundaries of said wilderness areas shall be held and used solely for mining or processing operations and uses reasonably incident thereto; and hereafter, subject to valid existing rights, all patents issued under the mining laws of the United States affecting national forest lands designated by this Act as wilderness areas shall convey title to the mineral deposits within the claim, together with the right to cut and use so much of the mature timber therefrom as may be needed in the extraction, removal, and beneficiation of the mineral deposits, if needed timber is not otherwise reasonably available, and if the timber is cut under sound principles of forest management as defined by the national forest rules and regulations, but each such patent shall reserve to the United States all title in or to the surface of the lands and products thereof, and no use of the surface of the claim or the resources therefrom not reasonably required for carrying on mining or prospecting shall be allowed except as otherwise expressly provided in this Act: Provided, That, unless hereafter specifically authorized, no patent within wilderness areas designated by this Act shall issue after December 31, 1983, except for the valid claims existing on or before December 31, 1983. Mining claims located after the effective date of this Act within the boundaries of wilderness areas designated by this Act shall create no rights in excess of those rights which may be patented under the provisions of this subsection. Mineral leases, permits, and licenses covering lands within national forest wilderness areas designated by this Act shall contain such reasonable stipulations as may be prescribed by the Secretary of Agriculture for the protection of the wilderness character of the land consistent with the use of the land for the purposes for which they are leased, permitted, or licensed. Subject to valid rights then existing, effective January 1,1984, the minerals in lands designated by this Act as wilderness areas are withdrawn from all forms of appropriation under the mining laws and from disposition under all laws pertaining to mineral leasing and all amendments thereto.

(4) Within wilderness areas in the national forests designated by this Act, (1) the President may, within a specific area and in accordance with such regulations as he may deem desirable, authorize prospecting for water resources, the establishment and maintenance of reservoirs, water-conservation works, power projects, transmission lines, and other facilities needed in the public interest, including the road construction and maintenance essential to development and use thereof, upon his determination that such use or uses in the specific area will better serve the interests of the United States and the people thereof than will its denial; and (2) the grazing of livestock, where established prior to the effective date of this Act, shall be permitted to continue subject to such reasonable regulations as are deemed necessary by the Secretary of Agriculture.

(5) Other provisions of this Act to the contrary notwithstanding, the management of the Boundary Waters Canoe Area, formerly designated as the Superior, Little Indian Sioux, and Caribou Roadless Areas, in the Superior National Forest, Minnesota, shall be in accordance with the general purpose of maintaining, without unnecessary restrictions on other uses, including that of timber, the primitive character of the area, particularly in the vicinity of lakes, streams, and portages: Provided, That nothing in this Act shall preclude the continuance within the area of any already established use of motorboats.

(6) Commercial services may be performed within the wilderness areas designated by this Act to the extent necessary for activities which are proper for realizing the recreational or other wilderness purposes of the areas.

(7) Nothing in this Act shall constitute an express or implied claim or denial on the part of the Federal Government as to exemption from State water laws.

(8) Nothing in this Act shall be construed as affecting the jurisdiction or responsibilities of the several States with respect to wildlife and fish in the national forests.

State and Private Lands Within Wilderness Areas

Sec. 5. (a) In any case where State-owned of privately owned land is completely surrounded by national forest lands within areas designated by this Act as wilderness, such State or private owner shall be given such rights as may be necessary to assure adequate access to such State-owned or privately owned land by
such State or private owner and their successors in interest, or the State-owned land or privately owned land shall be exchanged for federally owned land in the same State of approximately equal value under authorities available to the Secretary of Agriculture: Provided, however, That the United States shall not transfer to a state or private owner any mineral interests unless the State or private owner relinquishes or causes to be relinquished to the United States the mineral interest in the surrounded land.

(b) In any case where valid mining claims or other valid occupancies are wholly within a designated national forest wilderness area, the Secretary of Agriculture shall, by reasonable regulations consistent with the preservation of the area as wilderness, permit ingress and egress to such surrounded areas by means which have been or are being customarily enjoyed with respect to other such areas similarly situated.

(c) Subject to the appropriation of funds by Congress, the Secretary of Agriculture is authorized to acquire privately owned land within the perimeter of any area designated by this Act as wilderness if (1) the owner concurs in such acquisition or (2) the acquisition is specifically authorized by Congress.

Gifts, Bequests, and Contributions

Sec. 6. (a) The Secretary of Agriculture may accept gifts or bequests of land within wilderness areas designated by this Act for preservation as wilderness. The Secretary of Agriculture may also accept gifts or bequests of land adjacent to wilderness areas designated by this Act for preservation as wilderness if he has given sixty days advance notice thereof to the President of the Senate and the Speaker of the House of Representatives. Land accepted by the Secretary of Agriculture under this section shall become part of the wilderness area involved. Regulations with regard to any such land may be in accordance with such agreements, consistent with the policy of this Act, as are made at the time of such gift, or such conditions, consistent with such policy, as may be included in, and accepted with, such bequest.

(b) The Secretary of Agriculture or the Secretary of the Interior is authorized to accept private contributions and gifts to be used to further the purpose of this Act.

Annual Reports

Sec. 7. At the opening of each session of Congress, the Secretaries of Agriculture and Interior shall jointly report to the President for transmission to Congress on the status of the wilderness system, including a list and descriptions of the areas in the system, regulations in effect, and other pertinent information, together with any recommendations they may care to make.

Approved September 3, 1964.

Legislative History

House Reports: No. 1538 accompanying H.R. 9070 (Comm. on Interior & Insular affairs) and No. 1829 (Comm. of Conference).

Senate Report No. 109 (Comm. on Interior & Insular Affairs).

Congressional Record:

Vol. 109 (1963): Apr. 4, 8, considered in Senate. Apr. 9, considered and passed Senate.

Vol. 110 (1964): July 28, considered in House. July 30, considered and passed House, amended, in lieu of H. R. 9070. Aug. 20, House and Senate agreed to conference report.

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Appendix B: California and Nevada Rangeland Health Standards and Guidelines

Sierra Front-Northwestern Great Basin Area

PREAMBLE

The Standards and Guidelines for livestock grazing on Bureau of Land Management lands are written to accomplish the four fundamentals of rangeland health, insofar as they are affected by livestock grazing practices. Those fundamentals are:

- Watersheds are properly functioning;
- Ecological processes are in order;
- Water quality complies with State Standards; and
- Habitats of protected species are in order.

Other uses can affect the health of the land, and Guidelines for these currently exist or will be developed as needed. In addition, implementation of livestock grazing guidelines must be coordinated with other uses of the land, and collectively these uses should not detract from the goal of achieving public land health.

Standards, Indicators and Guidelines will be implemented through Standard public land management practices as defined in the Nevada Rangeland Monitoring Handbook and the other documents listed in Appendix A [of this appendix].

Standards: The goal to be achieved.

Indicators: Indicators are observations or measurements of physical, chemical or biological factors that should be used to evaluate site conditions or trends, appropriate to the potential of the site. Indicators assist in determining whether Standards are met or Guidelines followed.

Guidelines: Guidelines are livestock management practices (e.g., tools, methods, strategies and techniques) designed to achieve healthy public lands as defined by Standards and portrayed by Indicators. Guidelines are designed to provide direction, yet offer flexibility for local implementation through activity plans and grazing permits. Activity plans may add specificity to the Guidelines based on local goals and objectives as provided for in adopted manuals, handbooks and policy. Not all Guidelines fit all circumstances. Monitoring and site specific evaluation will determine if the Standards are being met or the trend on a particular site is toward desired objectives, and if the correct Guidelines are being applied. The BLM Authorized Officer, in consultation with public land users, will identify and document acceptable or unavoidable exceptions on a case-by-case basis.

STANDARDS FOR RANGELAND HEALTH

STANDARD 1. SOILS:

Soil processes will be appropriate to soil types, climate and landform. As indicated by:

- Surface litter is appropriate to the potential of the site;
- Soil crusting formations in shrub interspaces, and soil compaction are minimal or not in evidence, allowing for appropriate infiltration of water;

- Hydrologic cycle, nutrient cycle and energy flow are adequate for the vegetative communities;
- Plant communities are diverse and vigorous, and there is evidence of recruitment; and
- Basal and canopy cover (vegetative) is appropriate for site potential.

STANDARD 2. RIPARIAN/WETLANDS:

Riparian/Wetland systems are in properly functioning condition. As indicated by:

- Sinuosity, width/depth ratio and gradient are adequate to dissipate streamflow without excessive erosion or deposition;
- Riparian vegetation is adequate to dissipate high flow energy and protect banks from excessive erosion; and
- Plant species diversity is appropriate to riparian-wetland systems.

STANDARD 3. WATER QUALITY:

Water quality criteria in Nevada or California State Law shall be achieved or maintained. As indicated by:

- Chemical constituents do not exceed the water quality Standards;
- Physical constituents do not exceed the water quality Standards;
- Biological constituents do not exceed the water quality Standards; and
- The water quality of all water bodies, including ground water located on or influenced by BLM lands will meet or exceed the applicable Nevada or California water quality Standards. Water quality Standards for surface and ground waters include the designated beneficial uses, numeric criteria, narrative criteria, and antidegradation requirements set forth under State law, and as found in Section 303(c) of the Clean Water Act.

STANDARD 4. PLANT AND ANIMAL HABITAT:

Populations and communities of native plant species and habitats for native animal species are healthy, productive and diverse. As indicated by:

- Good representation of life forms and numbers of species;
- Good diversity of height, size, and distribution of plants;
- Number of wood stalks, seed stalks, and seed production adequate for stand maintenance; and
- Vegetative mosaic, vegetative corridors for wildlife, and minimal habitat fragmentation.

STANDARD 5. SPECIAL STATUS SPECIES HABITAT:

Habitat conditions meet the life cycle requirements of special status species. As indicated by:

- Habitat areas are large enough to support viable populations of special status species;
- Special status plant and animal numbers and ages appear to ensure stable populations;
- Good diversity of height, size, and distribution of plants;
- Number of wood stalks, seed stalks, and seed production adequate for stand maintenance; and
- Vegetative mosaic, vegetative corridors for wildlife, and minimal habitat fragmentation.

GUIDELINES FOR GRAZING MANAGEMENT:

1. Waters must be free from high temperature, biocides, organisms pathogenic to human beings, toxic, corrosive or other deleterious substances attributable to domestic or industrial waste or other controllable sources at levels or combinations to interfere with any beneficial use of the water. Compliance with the provisions of this subsection may be determined in accordance with methods of testing prescribed by the State. If used as an Indicator, survival of test organisms must not be significantly less in test water than in control water.

2. Grazing management practices should be planned and implemented to meet water quality provisions in either California State water law or Nevada Administrative Code Section 445A.120-121 as applicable.

3. Management practices within allotments will maintain or promote stream channel morphology, appropriate soil organisms; adequate amounts of ground cover to support infiltration, maintain soil moisture storage, and stabilize soils; and the hydrologic cycle, nutrient cycle and energy flow.

4. After a range fire or other natural catastrophic event, vegetation should be returned to the native species as rapidly as possible, to afford forage and habitat for native animals. If a nurse crop is needed to protect the land from erosion, all native nurse crops should be used first.

5. Treated areas will be rested from livestock grazing for two growing seasons or until seedlings are established or the vegetative response has achieved objective levels. Wild horse and burros removed from Herd Management Areas will be restored after rehabilitation objectives have been met.

6. Alternative solutions (e.g., reseeding, funding, labor, equipment use or rental) to facilitate fire rehabilitation may be included in cooperative agreements involving qualified groups and individuals who want to participate.

7. Appropriate livestock grazing treatments will be implemented to control the frequency, duration, and level of grazing use. Where livestock grazing is authorized, grazing systems will provide within any one grazing year one or more of the following treatments:

a. Rest or deferment from livestock grazing on a specified area as appropriate to meet Standards.

b. Systematic rotation of deferred use and/or rest from livestock grazing among two or more units.

c. Continuous, season-long use where it has been demonstrated to be consistent with achieving identified Standards. Once season long use is determined to be unacceptable, an alternative system will be developed and implemented before termination of season long use, prior to the next grazing season.

d. Excluding further livestock grazing within the affected use area through appropriate techniques when utilization objectives are reached.

8. Conservation of Federal threatened or endangered, proposed, species of concern (formally Category One and Two) and other special status species is promoted by the restoration and maintenance of their habitats.

9. Salt and/or supplements will be placed at least ¼ mile from live waters (springs/streams) and outside of associated riparian areas, permanent livestock watering facilities, wet or dry meadows, and aspen stands. Also salt should not be placed in known historic properties.

10. Night bedding of sheep will be located at least ¼ mile from live waters, streams, springs, seeps, associated riparian areas, wet or dry meadows, and aspen stands.

11. Encourage the use of prescribed and natural fires, meeting prescription objectives, for the restoration and maintenance of healthy rangelands.

12. Departure from traditional grazing management practices may be authorized by BLM to achieve Standards on a case-by-case experimental basis for rangeland restoration and rehabilitation.

13. The best available science and technology will be utilized in monitoring and assessing the condition of rangelands from the pasture to the BLM District level.

14. Recognizing State Water Law requirements, wildlife and wild horses/burros within their Herd Management Areas will have access to surface water they customarily use.

15. Design of water facilities will incorporate features to ensure safe access and escape for small animals and birds.

16. The development of springs and seeps or other projects affecting water and associated resources shall be designed to maintain the associated riparian area and assure the attainment of Standards.

17. Grazing management practices shall be planned and implemented to allow for habitat requirements of wildlife and wild horses and burros within Herd Management Areas.

18. Implement aggressive action to reduce the invasion of exotic plant species into native plant communities. Control the spread of noxious weeds through various methods such as, grazing management, fire management and other vegetative management practices.

19. Riparian structural developments (i.e., gabions, dams, etc.) designed to achieve improvement in riparian and wetland conditions shall only be implemented in conjunction with changes in existing grazing management practices, where grazing is a significant factor contributing to a riparian condition needing such attention. Where grazing is not a significant factor causing a riparian condition needing attention, structural developments designed to achieve improvement in riparian and wetland conditions may be implemented independent of changes in existing grazing management practices.

20. The utilization, monitoring and evaluation process will be used as a tool to promote healthy rangelands and achieve Standards.

21. Implement grazing management practices that sustain biological diversity across the landscape.

22. To prevent transmission of disease between domestic and bighorn sheep, adopt and implement the "Guidelines for Domestic Sheep Management in Bighorn Sheep Habitats" contained in Mountain Sheep Ecosystem Management Strategy in the 11 Western States and Alaska.

23. Rangeland management plans will consider listings of known historic properties and new eligible properties as they become known

Standards and Guidelines for Rangeland Health in Northeastern California and Northwestern Nevada

The Preferred Alternative described in the final EIS (Alternative 5), with minor changes for clarification, has been chosen as the Standards and Guidelines for Northeastern California and Northwestern Nevada. The changes reflected in this Decision are within the scope and analysis of the EIS. These Standards and Guidelines will take effect immediately upon their approval by the Secretary of the Interior. These standards and guidelines were developed for, and are hereby adopted for, that part of northeastern California and northwestern Nevada formerly known as the Susanville District.

Preamble

Healthy rangelands contribute to the social and economic well being of rural communities in Northeastern California and Northwestern Nevada, and they provide, over the long term, the most reliable harvest of rangeland resources. The objective of rangeland resource planning is to integrate BLM resources with other resources to achieve the mandate of multiple-use and sustained yield management of renewable resources in an environmentally sound and cost-effective manner.

The **Standards** of rangeland health are expressions of physical and biological condition or degree of function required for healthy, sustainable rangelands. The Standards are applied on a landscape scale.
Some standards may not apply to all acres. For example, a mosaic of vegetation types and age classes
Decision -- Page 3 may produce the diversity associated with healthy rangelands; however, some individual vegetation communities within the mosaic may lack diversity. The Standards always relate to the capability or potential of a specific site. The land will not be expected to produce vegetation or support habitats not attainable due to climate, soils, or other limiting attributes. In instances where site capability or potential has changed due to human-caused or natural disturbance, recognition will be given to the modified capability when setting or assigning a standard to (for) the site. The Standards are designed to establish the threshold for healthy rangelands. In some circumstances, an exception to the Standards or Guidelines may be necessary or unavoidable; however, **these instances should be under extreme conditions only**, and fully justified (documented) in order to be acceptable.

The **Guidelines** for grazing management are the types of grazing management methods and practices determined to be appropriate to ensure that standards can be met or that significant progress can be made toward meeting the standard. The Guidelines were designed to provide direction, yet offer flexibility for implementation through activity plans and terms and conditions for grazing permits. The Bureau of Land Management (BLM) must operate within the constraints of other regulatory requirements that may affect how standards and guidelines are applied for livestock grazing, for example the Wild Free-Roaming Horse and Burro Act (1971).

STANDARD 1: UPLAND SOILS

Upland soils exhibit infiltration and permeability rates that are appropriate to soil type, climate and landform, and exhibit functional biological, chemical and physical characteristics.

Meaning that:

Precipitation is able to enter the soil surface and move through the soil profile at a rate appropriate to soil type, climate, and landform; the soil is adequately protected against human-caused wind or water erosion; and the soil fertility is maintained at, or improved to, the appropriate level.

Criteria to Meet Standard:

* Ground cover (vegetation, litter, and other types of ground cover such as rock fragments) is sufficient to protect sites from accelerated erosion.
* Evidence of wind and water erosion, such as rills and gullies, pedestaling, scour or sheet erosion, and deposition of dunes is either absent or, if present, does not exceed what is natural for the site.

* Vegetation is vigorous, diverse in species composition and age class, and reflects the potential natural vegetation or desired plant community for the site.

STANDARD 2: STREAMS
Stream channel form and function are characteristic for the soil type, climate, and landform.

Meaning that:
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Channel gradient, pool frequency, width to depth ratio, roughness, sinuosity, and sediment transport are able to function naturally and are characteristic of the soil type, climate, and landform.

Criteria to Meet Standard:
* Gravel bars and other coarse textured stream deposits are successfully colonized and stabilized by woody riparian species.
* Stream bank vegetation is vigorous and diverse, mostly perennial, and holds and protects banks during high stream flow events.
* The stream water surface has a high degree of shading, resulting in cooler water in summer and reduced icing in winter.
* Portions of the primary floodplain are frequently flooded (inundated every 1-5 years).

STANDARD 3: WATER QUALITY
Water will have characteristics suitable for existing or potential beneficial uses. Surface and groundwater complies with objectives of the Clean Water Act and other applicable water quality requirements, including meeting the California and Nevada State standards, excepting approved variances. Management Objective: For water bodies, the primary objective is to maintain the existing quality and beneficial uses of water, protect them where they are threatened, and restore them where they are currently degraded. This objective is of even higher priority in the following situations:
a. Where beneficial uses of water bodies have been listed as threatened or impaired pursuant to Section 303(d) of the Federal Clean Water Act;
b. Where aquatic habitat is present, has been present, or is potentially present for Federal threatened or endangered, candidate, and other special status species dependent on water resources; and
c. In designated water resource sensitive areas such as riparian and wetland areas.

Meaning That:
BLM will:
Maintain the physical, biological, and chemical integrity of waters flowing across or underlying the lands it administers.
Protect the integrity of these waters where it is currently threatened.
Insofar as is feasible, restore the integrity of these waters where it is currently impaired.
Not contribute to pollution and take action to remedy any pollution resulting from its actions that violates California and Nevada water quality standards, Tribal water quality standards, or other applicable water quality requirements (e.g., requirements adopted by SWRCB or RWQCB in Decision -- Page 5
California, or U.S. EPA pursuant to Section 303(d) of the Clean Water Act or the Coastal Zone Reauthorization Act). Where action related to grazing management is required, such action will
be taken as soon as practicable but not later than the start of the next grazing year (in accordance with 43 CFR 4180.1). Be consistent with the non-degradation policies as identified by the States. Develop and execute a Management Agency Agreement with the States of California and Nevada for the efficient protection of water quality associated with BLM's management. Work with the States' water quality administrative agencies and U.S. EPA to establish appropriate beneficial uses for public waters, establish appropriate numeric targets for 303(d)- listed water bodies, and implement the applicable requirements to ensure that water quality on public

lands meets the objectives for the designated beneficial uses of the water. Develop and implement Best Management Practices (BMPs) approved by the States to protect
and restore the quality and beneficial uses of water, and monitor both implementation and effectiveness of the BMPs. These BMPs will be developed in full consultation, coordination, and cooperation with permittees and other interests.
State or Tribal approved variances or exceptions to water quality standards may be applicable within their Basin Plans for specific types of activities or actions. BLM will follow State or Tribal administrative procedures associated with variances.

As Indicated By:
* The following do not exceed the applicable requirements for physical, chemical, and biological constituents including, but not limited to: temperature, nutrients, fecal coliform, turbidity, sediment, dissolved oxygen, aquatic organisms and plants (e.g., indicator macroinvertebrates, fish, algae, and plants).
* Achievement of the standards for riparian, wetlands, and water bodies.
* Monitoring results or other data that show water quality is meeting the standard.

STANDARD 4: RIPARIAN and WETLAND SITES
Riparian and Wetland areas are in properly functioning condition and are meeting regional and local management objectives.

Meaning that:
The riparian and wetland vegetation is controlling erosion, stabilizing stream banks, shading water areas to reduce water temperature, filtering sediment, aiding in floodplain development, dissipating energy, delaying floodwater and increasing recharge of ground water that is characteristic for these sites. Vegetation surrounding seeps and springs is controlling erosion and reflects the potential natural vegetation for the site.

Criteria to Meet Standard:
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* Riparian vegetation is vigorous and mostly perennial, and diverse in species composition, age class and life form sufficient to stabilize stream banks and shorelines.
* Riparian vegetation and large woody debris are well anchored and capable of withstanding high stream flow events.
* Negligible accelerated erosion as a result of human related activities is evident.
* Age class and structure of woody riparian and wetland vegetation are appropriate for the site.

Exceptions and Exemptions to Standard 4 (where Standard 4 is not applicable)
* Structural facilities constructed for livestock/wildlife water or other purposes are not natural wetland and/or riparian areas. Examples are: water troughs, stock ponds, flood control structures, tailings ponds, water gaps on fenced or otherwise restricted stream corridors, etc.

STANDARD 5: BIODIVERSITY
Viable, healthy, productive and diverse populations of native and desired plant and animal species, including special status species, are maintained.

Meaning that:
Native and other desirable plant and animal populations are diverse, vigorous, able to reproduce, and support nutrient cycles and energy flows.

Criteria to Meet Standard:
* Wildlife habitats include seral stages, vegetation structure, and patch size to promote diverse and viable wildlife populations.

* A variety of age classes are present for most species.
* Vigor is adequate to maintain desirable levels of plant and animal species to ensure reproduction and recruitment of plants and animals when favorable events occur.
* Distribution of plant species and their habitats allow for reproduction and recovery from localized catastrophic events.
* Natural disturbances such as fire are evident, but not catastrophic.
* Non-native plant and animal species are present at acceptable levels.
* Habitat areas are sufficient to support diverse, viable, and desired populations and are connected adequately with other similar habitat areas.
* Adequate organic matter (litter and standing dead plant material) is present for site protection and decomposition to replenish soil nutrients and maintain soil health.
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GUIDELINES FOR LIVESTOCK GRAZING
The following guidelines are meant to apply to one or more of the standards for rangeland health.

Guideline 1: Adequate stubble will be present on all stream-side areas at the end of the growing season, or at the end of the grazing season if grazing occurs after fall dormancy. The residual or regrowth should provide sufficient herbaceous forage biomass to meet the requirement of plant vigor maintenance, bank protection, and sediment entrapment. Stubble height thresholds will be set on a site-specific basis, except for those allotments to which Guideline 16 applies (see Guideline 16 for an explanation of when Guideline 16 applies). Utilization of stream-side herbaceous and woody plants should be limited to a specified amount of the current growth, and/or livestock should be removed to allow sufficient time for plant regrowth.

a. Late season use (summer or fall grazed pastures) requires more restrictive utilization based on site specific situations.

b. Special situations such as fragile fisheries habitats or easily eroded stream banks may require more restrictive utilization thresholds.

c. Hoof action impacts or chiseling on stream banks will not exceed specified thresholds so that stream bank stability is maintained or improved.

Guideline 2: Desired seral states will be determined through the Allotment Management Plan development process; generally the goal will be to achieve advanced ecological status in the riparian zone, except where site-specific objectives call for lower ecological status (such as meadows in important sage grouse habitat, where the objective might call for a pattern of meadows in different seral stages from mid-seral to the potential natural community). These site-specific objectives will be determined through allotment management plans or other plans and analyzed through the NEPA process.

Guideline 3: Periods of rest from livestock grazing or other avoidable disturbances must be provided during/after periods of stress on the land (e.g.: fire, flood, drought) and during critical times of plant growth.

Guideline 4: Plans for grazing on any allotment must consider other uses (recreation, archaeological sites, wildlife, horses and burros, mineral resource extraction, etc.) and be coordinated with the other users of public lands so that overall use does not detract from the goal of achieving rangeland health.

Guideline 5: Intensity, frequency, season-of-use, and distribution of grazing shall provide for growth and reproduction of desired plant species and the achievement of the potential natural vegetation or desired plant community.

Guideline 6: Grazing permits will include site-specific, measurable terms and conditions.

Guideline 7: Design and work towards implementation of a grazing management strategy for livestock for each grazing unit (pasture) within I (Improvement) and M (Maintenance) category allotments, to maintain or improve rangeland health. This may consist of, but not be limited to, season-of-use, rotation, or by setting utilization levels for desirable plants. Each management plan implemented will incorporate the factors necessary to maintain the health of desirable plants.
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Guideline 8: Determination of grazing use by livestock must provide for the habitat requirements of fish and wildlife.

Guideline 9: Grazing management practices must sustain biological diversity across the landscape. A mosaic of seral stages, vegetation corridors, and minimal habitat fragmentation must be maintained.

Guideline 10: Take aggressive action to reduce the invasion of undesirable exotic plant species into native plant communities. The spread of noxious weeds will be controlled through appropriate methods such as grazing management, fire management, and other management practices.

Guideline 11: Prescribed fire and (natural) prescribed fire will be utilized to promote a mosaic of healthy plant communities and vegetative diversity.

Guideline 12: Grazing and other management practices shall take advantage of transitional opportunities (e.g., drought, flood, fire) to enhance or establish populations of desirable tree, shrub, herbaceous and grass species. Utilization levels will be established for desired seedlings, saplings, and/or mature plants to promote their presence in the plant community.

Guideline 13: Development of springs, seeps, and other water related projects shall be designed to promote rangeland health. Wherever possible, water sources shall be available year long for use by wildlife.

Guideline 14: Apply the management practices recognized and approved by the States of California and Nevada as Best Management Practices (BMPs) for grazing related activities to protect and maintain water quality.

Guideline 15: In watersheds draining into water bodies that have been listed or are proposed for listing as having threatened or impaired beneficial uses, and where grazing activities may contribute to the pollutants causing such impairment, the management objective is to fully protect, enhance, and restore the beneficial uses of the water.

Guideline 16: Utilization Levels to be Applied to those Allotments Not Meeting or Making Significant Progress Toward Meeting the Standards
If monitoring or documented observation indicates that one of more of the standards is not being met, and if significant progress is not being made toward meeting all of those standards that are not being met, and if there is evidence that current grazing practices are causing or contributing to this unsatisfactory condition, then the following utilization levels will be applied.

Utilization of key upland herbaceous species
UTILIZATION GUIDELINES
(adapted from Holechek 1988 and Holechek et al. 1998)
Community Type Percent of Use of Key Herbaceous Species
Salt desert shrubland 25-35
Semi-desert grass and shrubland 30-40
Sagebrush grassland 30-40

California annual grassland 50-60*
Perennial grass communities within the
California annual grassland vegetation type 30-40
Coniferous forest 30-40
Mountain shrubland 30-40
Oak woodland 30-40
Pinyon-juniper woodland 30-40
Alpine tundra 20-30
* Residual dry matter (RDM) guidelines will be used instead of these utilization levels for management of annual species in the California annual grassland. These RDM levels correspond approximately with these utilization levels. The RDM levels given in the table in the Final EIS under Alternative 5, Ukiah RAC Recommended Standards and Guidelines (Section 2.92), will be used for those few annual allotments within the area covered by this ROD.

Utilization of key upland browse species
There will be no more than 20 percent utilization of annual growth on key browse species prior to October 1 within identified deer concentration areas. These concentration areas are those areas within mule deer habitat where mule deer numbers are most likely to be concentrated during the winter season (winter season normally occurs from December 16 through March 31). These areas have been identified through State Fish and Game Agency fall and spring counts over a period of several years. Maps of these deer concentration areas are on file at the BLM Eagle Lake Field Office.

Utilization of key riparian species
A 4-6 inch minimum stubble height will remain at the end of the growing season in most riparian areas. There should be no more than 20% utilization on key riparian trees and shrub species in those areas where the presence of woody riparian species is necessary to meet standards.
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Application of the above utilization levels
These utilization guidelines will be applied to those areas of the allotment responsible for the determination that the allotment is not meeting the standards. For example, an allotment has 10 riparian areas, of which 6 have been determined to be in proper functioning condition and 4 have been determined to be functional–at risk. The utilization guidelines for riparian species given above would be applied to the 4 riparian areas that are functional–at risk, not to the 6 that are in proper functioning condition (although *all* of the riparian areas will be managed to meet the standards). Also, only those guidelines that are applicable to making progress toward meeting the standards that are not being met would be applied. For example, if only riparian standards are not being met, then only the guidelines applicable to utilization and stubble height of riparian vegetation would be applied. These utilization levels will be implemented unless and until a current site-specific analysis is completed and new utilization levels are developed for specific allotments and documented in allotment management plans, other management plans, and/or in terms and conditions of grazing permits/leases. New site-specific utilization levels that are developed may be more restrictive than the guidelines presented above, consistent with achieving the desired resource conditions (as prescribed in land use plans and activity plans) and progress toward meeting the standards.

Implementation of this guideline
1. Uplands (including perennial grass and browse communities). Guideline 16 will be implemented only on those upland areas that are responsible for the determination that the allotment is not meeting one or more of the standards and for which lighter utilization would be expected to move these areas toward meeting the standard(s). Management changes (such as changes in season of use, timing, duration, and/or intensity; rotational grazing; fencing; herding; and/or adjustments in stocking rates) will be implemented if utilization guidelines on the average of the upland key areas across the pasture (or allotment if there is only one pasture)

are exceeded for 2 consecutive years or in any 2 years out of every 5 years. In addition, at least 70% of upland key areas on the pasture (or allotment) are not to exceed maximum utilization guidelines in most years. Because of the potential long-term damage to perennial grass species associated with severe grazing, severe grazing use (>70% utilization) in any upland key area in any year will result in a management change the following year. If any particular key area fails to meet the guidelines for more than 2 consecutive years, then management action will be taken to remedy the problem in the area of the allotment that key area represents. The average (mean) utilization on key species will be estimated at each key area and used to determine if the guidelines have been met. There are indications that the median may be a better statistic to use than the mean; we will calculate both statistics from the same data sets and make a determination on which statistic to use after examining the data over a period of a few
years. See Appendix 20 of the Final EIS for further discussion on this issue. The management options to be implemented to meet this guideline will be determined in full consultation, cooperation, and coordination with affected permittees and other interests. For allotments not meeting or making significant progress toward meeting the standards (and for which lower utilization levels of perennial upland species would be expected to help move these allotments toward the standards), utilization data already in hand will be used to determine whether a management change is necessary. Thus, for example, if utilization on a particular key area has exceeded the thresholds for the two years previous to the approval of these standards and guidelines, a management change will Decision -- Page 11 be implemented prior to the first grazing year following this approval. In addition to implementing management changes that are expected to bring utilization levels within threshold values, close monitoring will follow to ensure that the grazing use levels are not exceeded during the grazing period following the management changes. If utilization levels are exceeded or expected to be exceeded during this period, a reduction or curtailment of further grazing in the area represented by the key area will be required for the remainder of the grazing season. In addition, further management changes will be implemented prior to the start of the next grazing season to bring utilization levels within thresholds.

2. Riparian areas (including herbaceous and woody plant communities). Guideline 16 will be implemented only on those riparian areas that are nonfunctional or functional—at risk and lighter utilization levels would be expected to move these areas toward meeting the standards. The guideline will apply where the riparian area in a healthy state has the capability to produce vegetation of the prescribed height. The stubble heights will be measured at the end of the growing season to determine if the guideline has been met. Management changes (such as changes in season of use, timing, duration, and/or intensity; rotational grazing; fencing; herding; and/or adjustments in stocking rates) will be implemented if stubble heights on the average of the key riparian areas across the pasture (or allotment if there is only one pasture) fall below the guidelines for 2 consecutive years or in any 2 years out of every 5 years. In addition, at least 70% of riparian key areas on the allotment are to exceed minimum stubble heights in most years. If any particular key area fails to meet the guidelines for more than 2 consecutive years, then management action will be taken to remedy the problem in the area of the allotment that key area represents. Because stream banks may be inadequately protected by heavy use in any one year and because stubble heights below 3 inches result in cattle shifting their preference to shrubs, stubble heights below 2 inches in any one year will require a management change in the following year. The mean stubble height on key riparian species will be estimated at each riparian key area and used to determine if the guidelines have been met. There are indications that the median may be a better statistic to use than the mean; we will calculate both statistics from the same data sets and make a determination on which statistic to use after examining the data over a period of a few years. See Appendix 20 of the Final EIS for further discussion on this issue.

For allotments not meeting or making significant progress toward meeting the standards (and for which higher stubble would be expected to help move these allotments toward the standards), stubble height data already in hand will be used to determine whether a management change is necessary. Thus, for example, if stubble heights on a particular key area have fallen below the thresholds for the two years previous to the approval of these standards and guidelines, a management change will be implemented prior to the first grazing year following this approval. In addition to implementing management changes that are expected to bring stubble heights within threshold values, close monitoring will follow to ensure that the grazing use levels are not exceeded

during the grazing period following the management changes. If utilization levels are exceeded or expected to be exceeded during this period, a reduction or curtailment of further grazing in the area represented by the key area will be required for the remainder of the grazing season. In addition, further management changes will be implemented prior to the start of the next grazing season to bring utilization levels within thresholds.

The management options to be implemented to meet this guideline will be determined in full consultation, coordination, and cooperation with affected permittees and other interests.

If reductions in permitted use are required
Any reductions in permitted use required as a result of implementing this guideline will be held in suspension and apportioned back to the permittee(s) or lessee(s) authorized to graze in the affected allotment if rangeland health improves to the extent that the authorized officer determines additional forage to be available (see Implementation, Appendix 1, for more information on this).

Guideline 17: Rangeland monitoring to determine utilization of forage resources and trend of rangeland health will be conducted in each allotment based on current accepted practices and techniques as directed in the Interagency Technical References: *Utilization Studies and Residual Measurements* (BLM et al. 1996b) and *Sampling Vegetation Attributes* (BLM et al. 1996a). Monitoring methodologies will be applicable to local conditions and developed in consultation with permittees and interested publics. To the extent possible, monitoring methods will be simple and easily accomplished. BLM, permittees, or others will do the monitoring. BLM will be responsible for ensuring that the monitoring is conducted in accordance with currently accepted practices and techniques, for analyzing and interpreting the data collected (in consultation, coordination, and cooperation with affected permittees and other interests), and for the accuracy of the data.

Existing key areas will be used where they exist. New key areas will be selected in full consultation, coordination, and cooperation with affected permittees and other interests. BLM will periodically review established key areas to determine if they continue to be appropriate to management. This review will be done in full consultation, coordination, and cooperation with affected permittees and other interests. If there is disagreement between BLM, permittees, and other interests over the location of key areas, the RAC will be asked for ideas on resolution. The final decision on the placement of key areas, however, rests with BLM.

BLM, in cooperation with other agencies, including Cooperative Extension, the Natural Resources Conservation Service, and the Forest Service, will provide training for permittees and other interested parties on rangeland monitoring methods.

Appendix C: Road and Trail Maintenance and Classification Descriptions

BLM System Road Maintenance Classes with the Planning Area

Level	Description
3	This level of maintenance includes work needed to maintain the road primarily for seasonal use or occasionally open year round. Roads at this level will typically be low volume, single lane, low standard, native surface roads typical of a "resource" road to service low use recreation areas or other resource uses. Maintenance would include keeping drainage structures functional and maintenance of the road prism. Sight distance, driver safety and minimal road signage would be included in this level. "Resource Road/Local Road" fits this maintenance level.
4	This level of maintenance includes the work necessary to maintain year-round, high seasonal use with high concern for driver safety and convenience. Roads may be two lane, high standard native, aggregate or bituminous surfacing with medium volume. Preventative maintenance is done on an established schedule; problems are repaired as soon as discovered. "Local Road/Collector Road" fits this maintenance level.

BLM Trails Maintenance

Level	Description
2	Motorized trails would require condition surveys on a regular basis. Repairs would be done as soon as practicable, to prevent environmental damage and maintain access. Emphasis is given to maintaining drainage and mitigating hazards. The trail may be signed "Not Regularly Maintained". Major repair may not be done for several seasons.

Functional Road Classification Types:

BLM System Roads

Collector Roads (Level 4 or 5) – These bureau roads normally provide primary access to large blocks of land and connect with or are extensions of a public road system. They accommodate mixed traffic and serve many uses. They generally receive the highest volume of traffic of all roads in the bureau road system. User cost, safety, comfort and travel time are primary road management considerations. Collector roads usually require application of the highest standards used by the bureau.

Local Roads (Level 4 or 3) – These bureau roads normally serve a smaller area than collectors and connect to collectors or public road systems. Local roads receive lower volumes, carry fewer traffic types and generally serve fewer users. User cost, comfort and travel time are secondary to construction and maintenance cost considerations. Low volume local roads in mountainous terrain, where operating speed is reduced by effort of terrain, may be single lane roads with turnouts. Environmental impacts are reduced as steeper grades, sharper curves and lower design speeds than would be permissible on collector roads are allowable.

Resource Roads (Level 2) – These bureau roads are spur roads that provide point access and connect to local or collector roads. They carry very low volume and accommodate only one or two types of use. Use restrictions are applied to prevent conflicts between users needing the road and users attracted to the road. The location and design of these roads are governed by environmental compatibility and minimizing bureau costs with minimal consideration for user cost, comfort or travel time.

Trails

Motorized Trail (Level2) – Low use trail with little or no contact between parties. Little or no visitor use management. Visitors may encounter obstructions like rocks, brush or dusty conditions.

Appendix D: Emigrant Trail Inventory Classes

Trail Class	Description
Class A (OCTA Class 1) Trail Ruts	Pristine trail ruts and swales.
Class B (OCTA Class 3) Trail Ruts	Trail route confirmed through artifacts, rust stains, topography, etc. May include short segments of trail converted into 2-track roads where continued use of these roads would result in damage to pristine trail segments.
Class C (OCTA Class 2) Trail Ruts	Trail used as 2-track road, no improvements.
Class D (OCTA Class 4) Trail Ruts	Trail converted into improved road.
Class E (OCTA Class 5) Trail Ruts	Approximate trail route, all traces destroyed by man made or natural processes.
Trail Sites	Inscriptions, campsites, graves, etc. associated with emigrant trail traffic.

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Appendix E: Science Partnerships

Science Partnerships for Research into the Resources of the Black Rock Desert-High Rock Canyon Emigrant Trails National Conservation Area Planning Area

The Black Rock Desert–High Rock Canyon Emigrant Trails National Conservation Area (NCA) planning area offers the scientific community opportunities to participate in a variety of research activities associated with its nationally significant geological, ecological, cultural, historical, and economic features. The Bureau of Land Management has a goal of establishing a framework within which partnerships can be created and developed to further such scientific research designed to expand the scientific base necessary to better understand and manage these resources. The framework would be known as the Partnerships in Science (PS). The major goal of PS would be to encourage and facilitate research partnerships that allow the scientific community, resource managers, resource users, and the general public to pursue the common goal of learning more about what the NCA contains, how it evolved to what it is today, how it functions, and how it can best be understood and managed.

PS would provide a focal point for the objective exchange of information and ideas related to the NCA planning area. Further, PS would open the door to a fuller understanding of the rich and still largely unknown desert and mountain world in the Black Rock-High Rock country. Anyone wishing to pursue serious scientific inquiry that would be enhanced by access to the NCA, and who is supportive of the mission of PS, would be welcome to join the partnership. PS would coordinate selection, designation and protection of field research sites for approved projects. In partnership with funding sources PS could provide sponsored internships and facilities for on-site research projects and host annual conferences for presentation and discussion of research results. It is hoped that a wide range of research projects would develop under the PS umbrella. Examples could include:

- Pleistocene hydrology and relationships to the then-contemporary and subsequent biology of the region.
- Role of soil cryptophytes in stability and productivity of Great Basin desert ecosystems.
- Range vegetation changes since the late 1800s.
- Relationships between livestock grazing and sage-grouse populations.
- Aeolian influences on plant geography of the Black Rock Desert region.
- Human habitation near Pleistocene lakes of the Black Rock Desert region.
- Carrying capacity of playa landscapes for recreation uses and visitors.

Objectives

1. To encourage and facilitate research partnerships in which the scientific community, resource managers, resource users, and the general public could pursue the common goal of learning more about what the NCA contains, how it got this way, how it functions, and how it can best be understood and managed.

2. To provide both an administrative physical location and commitment to support inquiry into the natural, social and cultural phenomena, which would help to determine the present and future condition and uses of the area's natural resources.

Rationale

Sound management of the NCA planning area depends on the availability and application of accurate and complete information. To make land use decisions managers use information of varying reliability from many sources. The outcome of land use decisions could well depend on the completeness and quality of the supporting information upon which they are based. Good resource information is the key to good resource management. Few resource managers have ever felt that they had too much, or even enough, good information about their region of concern. The Black Rock Desert-High Rock Canyon Emigrant Trails NCA planning area is certainly a place needing much more reliable, relevant resource data for land managers than is currently available.

Encouragement and support of independent research into questions related to the NCA planning area will directly and materially improve the management of its resources and programs. The challenges of managing a complex system of inter-related physical, biological, social, cultural, political, and economic elements is an open-ended, ongoing process of developing reliable information and using that information to make good decisions. The best decisions are based on what has come to be labeled "good science." PS is dedicated to providing a good home for "good science".

Actions

1. Develop a working advisory board or committee under the overall direction of BLM's NCA Manager or authorized representative composed primarily of members from the scientific community both within and outside of BLM, but including representation from non-scientific members with interests in the objectives of PS.

2. Communicate actively with the general public to encourage participation and cooperation in scientific projects, inform the public of significant new discoveries, and invite public feedback on objectives and results of PS activities.

3. Coordinate, approve and permit where necessary research activities within the NCA planning area.

4. Sponsor an annual conference for presentation of research results.

5. Facilitate briefings and working sessions to transfer research results to managers.

Appendix F: Cultural, Traditional, and Paleontological Resource Use Categories

Cultural Resource Use Categories

A. Scientific Use. This category applies to any cultural property determined available for consideration as the subject of scientific or historical study at the present time, using currently available research techniques. Study includes methods that would result in the property's physical alteration or destruction. This category applies almost entirely to prehistoric and historic archaeological properties, where the method of use is generally archaeological excavation, controlled surface collection, and/or controlled recordation (data recovery). Recommendations to allocate individual properties to this use must be based on documentation of the kinds of data the property is thought to contain and the data's importance for pursuing specified research topics. Properties in this category need not be conserved in the face of a research or data recovery (mitigation) proposal that would make adequate and appropriate use of the property's research importance.

Management Direction

Compliance Directives

1. Data recovery rather than avoidance is the preferred option. Data recovery must be accomplished prior to impacts from conflicting uses or natural or human caused deterioration, or is undertaken to ameliorate impacts that have already occurred.

Resource Management Directives

1. Resources in this category are available for testing and excavation by qualified researchers operating under valid permits with acceptable research designs. Preference will be given to research proposals emphasizing priorities established in this plan. Resources in this category may be discharged from use or assigned to another category other than Conservation for Future Use once the resource has no further scientific use.

B. Conservation for Future Use. This category is reserved for any unusual cultural property, which, because of scarcity, a research potential that surpasses the current state of the art, singular historic importance, cultural importance, architectural interest, or comparable reasons, is not currently available for consideration as the subject of scientific or historical study that would result in its physical alteration. Cultural resources in this category must be determined eligible for, or listed on, the National Register of Historic Places. A cultural property included in this category is deemed worthy of segregation from all other land or resource uses, including cultural resource uses that would threaten the maintenance of its present condition or setting, as pertinent, and will remain in this use category until specified provisions are met in the future.

Management Direction

Compliance Directives

1. Avoidance is the preferred mitigation measure. Discretionary activities will be denied within boundaries of these resources. The land on which these sites are situated is not available for disposal.

a. If avoidance is impossible, then data recovery or other acceptable measures will be allowed after going through the required consultation processes. Since the majority of the plan area is for National Conservation Area and Wilderness, we anticipate that avoidance will be possible in the vast majority of cases with uncontrolled erosion being the most likely cause of data recovery efforts. For many of the sites in this category, the setting will be an important factor of the site's importance and integrity. In these cases, Visual Resource Management (VRM) prescriptions will be implemented to lessen effects, generally by conformance to VRM Class II standards. Other management efforts will also be taken to lessen noise and impacts to atmospheric elements.

b. In some instances, such as arbor glyphs (Basque aspen art) threatened by fire or death and decay of the tree, removal of objects or features for curation and display in a museum, visitors' center, or other qualified repository will be acceptable.

Resource Management Directives

1. Sites in this category have the highest priority for protection and preservation and will not be available for other current uses, including research or interpretation.

    a. A resource listed in the Conservation for Future Use category may be placed in another use management category if: (1) BLM identifies the specific criteria underlying this classification (for example, outstanding research potential), (2) the specific reasons for prohibitions or limitations are identified, and (3) BLM identifies or accepts methodological, technological or other criteria that if met or implemented justify alterations to the integrity of the resource and placement in another use category.

2. Protective actions may be taken to ensure preservation of those qualities providing the basis for classification. These actions, such as fencing, installation of erosion control structures, road closures, etc., must not impinge on the values and integrity of the site. Resources in this use category will be monitored at least semi-annually to assess potential threats.

C. Traditional Use. This category is to be applied to any cultural resource known to be perceived by a specified social and/or cultural group as important in maintaining the cultural identity, heritage, or well-being of the group. Cultural properties assigned to this category are to be managed in ways that recognize the importance ascribed to them and seek to accommodate their continuing traditional use.

Management Direction

Compliance Directives

1. Avoidance is the preferred treatment.

2. If avoidance is impossible, then data recovery and/or other acceptable measures will be implemented after consultation with the involved group(s) but before implementation of the proposed activity.

Resource Management Directives

1. Resources in this category are available for use by representative members of Native American tribal groups or other groups for limited collection of materials, non-destructive group uses, or other traditional uses.

a. Management should accommodate continued site access to the extent and manner possible.
b. Sites should be monitor annually to ensure that site use is not adversely affecting the site. Monitoring should include representatives of the involved group in assessing site condition.
c. Sites may be protected by fencing, road closures, etc., provided there has been consultation with the group(s) using the resource.

D. Public use. This category may be applied to any cultural property found to be appropriate for use as an interpretive exhibit in place, or for related educational and recreational uses by members of the general public. The category may also be applied to buildings suitable for continued use or adaptive use, for example, as staff housing or administrative facilities at a visitor contact or interpretive site, or as shelter along a hiking trail.

Management Direction

Compliance Management

1. Interpretation through development of on site facilities and/or published materials made available to the public is the identified treatment. Interpretation will be based on appropriate archaeological excavation and analysis, historic research, ethnographic research, or any combination of data gathering. Interpretation and development of information will reflect consultation with the SHPO.

Resource Management Directives

1. These sites are available for educational and recreational use by the general public. Testing, data recovery, historic research, oral histories, ethnographic research, and other treatment may be necessary to gather sufficient information for suitable educational and interpretive uses, to prevent damage from proposed recreational or educational uses, or both. Interpretation and development of information will reflect consultation with SHPO.
2. Existing public roads will be retained in their current use to provide for continued public access.
3. Signage may be part of the interpretive efforts when consistent with standards of size and appearance within the planning area.
4. Fences, erosion control devices, and other protective structures may be constructed to prevent or limit site damage.

E. Experimental Use. This category may be applied to a cultural property judged well-suited for controlled experimental study, to be conducted by BLM or others concerned with the techniques of managing cultural properties, which would result in the property's alteration, possibly including loss of integrity and destruction of physical elements. Committing cultural properties or the data they contain to loss must be justified in terms of specific information that would be gained and how it would aid in the management of other cultural properties. Experimental study should aim toward understanding the kinds and rates of natural or human-caused deterioration, testing the effectiveness of protection measures, or developing new research or interpretation methods and similar kinds of practical management information. It should not be applied to cultural properties

with strong research potential, traditional cultural importance, or good public use potential, if it would significantly diminish those uses.

Management Direction

Compliance Directives

1. These sites are reserved for studies concerning the effects of erosion, fire, or other site formational processes on cultural resources. The preferred Sec. 106 treatment for sites placed in the Experimental Use that are actively engaged in an Experimental Use Study will be avoidance so that the study can continue. If avoidance is impossible, then the site may be placed in the Discharged from Management category, or may undergo data recovery or other treatment depending on National Register eligibility and other factors. SHPO will be consulted concerning treatment of eligible properties.

Resource Management Directives

1. Experimental use studies should be implemented to collect information on the effects of erosion, fire, or other site formational processes. If the BLM determines that the useful experimental life of the site is exhausted, then it can be placed into Discharged from Use or other appropriate category. If BLM determines there will be an adverse effect to an Experimental Use category site that is listed on or eligible for the National Register, SHPO will be consulted regarding continued placement of the site in this category.

F. Discharged from Management. This category is assigned to cultural properties that have no remaining identifiable use. Most often these are prehistoric and historic archaeological properties, such as small surface scatters of artifacts or debris, whose limited research potential is effectively exhausted during documentation. Also, more complex archaeological properties that have had their salient information collected and preserved through mitigation or research may be discharged from management, as should cultural properties destroyed by any natural event or human activity. Properties discharged from management remain in the inventory, but they are removed from further management attention and do not constrain other land uses. Particular classes of unrecorded cultural properties may be named and described in advance as dischargeable upon documentation, but specific cultural properties must be inspected in the field and recorded before they may be discharged from management.

Management Direction

Compliance Directives

1. SHPO concurrence is required before any eligible or unevaluated property is placed in this use category.

2. Appropriate consultation is required before any site that is of cultural or religious significance to a tribe or other group is placed in this category.

Resource Management Directives

1. Same as compliance.

G. Traditional/Scientific Use. This category is assigned to cultural properties that require an emphasis on traditional use, as defined in C above, as their primary use and on scientific use, as defined in A above, as their secondary use. Where conflicts exist in use, the directives associated with the primary use prevail.

Management Direction

Compliance Directives

1. In consultation with affected tribes or other groups, develop appropriate mitigation actions.

    a. Do not approve any land use impacting sites in this category until the consultation process is complete and any necessary treatment plans are developed and implemented.

Resource Management Directives

1. These sites will be available for use by traditional users for limited collection of materials or non-destructive group uses. Management should accommodate continued site access to the extent and manner possible.

2. Research, that does not conflict with traditional use, or that may enhance traditional use, may be allowed after consultation with affected tribes or other groups.

H. Public/Scientific Use. This category is assigned to cultural properties that are most valuable for Public use, as defined in D above, and that may be used available for scientific use, as defined in A above, that enhances the properties public use

Management Direction

Compliance Directives

1. Interpretive and educational actions, including but not limited to on site interpretation, signage or publications, is the preferred treatment action.

2. Data recovery, or other treatments, that do not diminish the Public Use Value of the resource, may be authorized.

    a. As much as practical, data recovery, or other treatment actions, will involve volunteers and be open to the public in ways that do not interfere with treatment activities.

Resource Management Directives

1. These sites will be available for educational and recreational use by the general public. Testing, data recovery, and other treatment may be necessary to gather sufficient information for suitable educational and interpretive uses, or to treat damage from recreational uses.

I. Conservation/Scientific Use. This category is assigned to cultural properties that are primarily valuable for conservation use, as defined in B above, and that may be used for scientific purposes, as defined in A above, that do not conflict with conservation use. Where conflicts exist in use, the directives associated with the primary use (Conservation) prevail. The land on which these sites are situated is not available for disposal.

Management Direction

Compliance Directives

1. Avoidance is the primary treatment action. Discretionary actions will be denied within the boundaries of the resource.

2. Where avoidance is not possible, data recovery, or other treatment is required.

Resource Management Directives

1. Sites in this category will be managed to avoid degradation from land uses and from natural processes. This can include implementation of actions such as fencing, construction of erosion control devices, road closures, etc.

2. Sites may be assigned to other uses after consultation with the SHPO to develop appropriate research or interpretation plans.

I. Conservation/Public Use. This category is assigned to cultural properties that are primarily valuable for conservation use, as defined in B above, and that may be used for public purposes, as defined in D above, that do not conflict with conservation use.

Management Direction

Compliance Directives

1. Avoidance is the primary treatment action.

2. Data recovery, or other treatment that does not conflict with conservation, may be allowed.

Resource Management Directives

1. Sites in this category will be managed to avoid degradation from land uses and from natural processes.

Sites may be used for interpretation or other public uses after consultation with the SHPO to ensure that adverse effects from these activities are avoided. Treatment of effects may include data recovery.

Properties of Cultural and Religious Importance

Use categorizations would be established during the planning process with appropriate Native American groups. Use categories applicable to properties of traditional religious and cultural importance are limited to traditional use, conservation use, and traditional/scientific use using definitions established above and may be modified as a result of the Native American consultation process. In addition, the category of scientific use, as defined in the cultural resource section above, might apply to human burials recovered prior to enactment of NAGPRA and determined by BLM as unaffiliated. The category of discharged from management could also be employed, provided the original basis for the property's importance was deemed absent or destroyed, based on appropriate consultation. The category of "conservation for future use" would exclude traditional uses in order to allow the property (e.g., a resource area) to re-establish those qualities that form the basis for the traditional use. Use of this category would have to reflect consultation and must identify conditions under which traditional use would eventually resume.

A. Traditional Use. This category is to be applied to any properties of traditional religious and cultural importance known to be perceived by a specified social and/or cultural group as important in maintaining the cultural identity, heritage, or well being of the group. Properties assigned to this category are to be managed in ways that recognize the importance ascribed to them and seek to accommodate their continuing traditional use.

Management Direction

Compliance Directives

1. Avoidance is the preferred treatment.

2. If avoidance is impossible, then data recovery and/or other acceptable measures will be implemented after consultation with the involved group(s) but before implementation of the proposed activity.

Resource Management Directives

1. Resources in this category are available for use by representative members of Native American tribal groups or other groups for limited collection of materials, non-destructive group uses, or other traditional uses.

    a. Management should accommodate continued site access to the extent and manner possible.
    b. Sites should be monitor annually to ensure that site use is not adversely affecting the site. Monitoring should include representatives of the involved group in assessing site condition.
    c. Sites may be protected by fencing, road closures, etc., provided there has been consultation with the group(s) using the resource.

2. Ethnographic studies will be initiated when funding is available to identify these types of properties and to ensure that they receive the desired level of management.

a. **Traditional/Scientific Use.** This category is assigned to properties of traditional religious and cultural importance that require an emphasis on traditional use, as defined in A above, as their primary use and on scientific use, as defined in the cultural resource categories, as their secondary use. Where conflicts exist in use, the directives associated with the primary use prevail.

Management Direction

Compliance Directives

1. In consultation with affected tribes or other groups, develop appropriate mitigation actions.

a. Do not approve any land use impacting sites in this category until the consultation process is complete and any necessary treatment plans are developed and implemented.

Resource Management Directives

1. These sites will be available for use by traditional users for limited collection of materials or non-destructive group uses. Management should accommodate continued site access to the extent and manner possible.

2. Ethnographic studies will be initiated when funding is available to identify these types of properties and to ensure that they receive the desired level of management. Additional research that does not conflict with traditional use, or that may enhance traditional use, may be allowed after consultation with affected tribes or other groups.

a. **Conservation for Future Use.** This category is reserved for any unusual property of traditional religious and cultural importance, which, because of scarcity, singular cultural importance, or comparable reasons, is not currently available for consideration as the subject of scientific or historical study or traditional use that would result in its physical alteration. Properties of traditional religious and cultural importance in this category must be determined eligible for, or listed on, the National Register of Historic Places. A property included in this category is deemed worthy of segregation from all other land or resource uses, including cultural resource uses that would threaten the maintenance of its present condition or setting, as pertinent, and will remain in this use category until specified provisions are met in the future.

Management Direction

Compliance Directives

1. Avoidance is the preferred mitigation measure. Discretionary activities will be denied within boundaries of these resources. The land on which these sites are situated is not available for disposal.

a. If avoidance is impossible, then data recovery or other acceptable measures will be allowed after going through the required consultation processes. Since the majority of the plan area is for National Conservation Area and Wilderness, we anticipate that avoidance will be possible in the vast majority of cases with uncontrolled erosion being the most likely cause of data recovery efforts. For many of the sites in this category, the setting will be an important factor of the site's importance and integrity. In these cases, Visual Resource Management (VRM) prescriptions will be implemented to lessen effects, generally by conformance to VRM Class II standards. Other management efforts will also be taken to lessen noise and impacts to atmospheric elements.

Resource Management Directives

1. Properties in this category have the highest priority for protection and preservation and will not be available for other current uses, including research or interpretation.

a. A resource listed in the Conservation for Future Use category may be placed in another use management category if: (1) BLM identifies the specific criteria underlying this classification, (2) the specific reasons for prohibitions or limitations are identified, and (3) BLM identifies or accepts methodological, technological or other criteria that if met or implemented justify alterations to the integrity of the resource and placement in another use category.

a. Protective actions may be taken to ensure preservation of those qualities providing the basis for classification. These actions, such as fencing, installation of erosion control structures, road closures, etc., must not impinge on the values and integrity of the site. Resources in this use category will be monitored at least semi-annually to assess potential threats.

Specific information about properties of traditional religious and cultural importance within the study area is very limited, reflecting a general lack of formal consultation and data collection. Such consultation should occur in the future to gather important data. Until that is done, existing cultural resources overviews and other reports (e.g., Bengston 2002) prepared by anthropologists and archaeologists are used. Property type categories are generalized from information gathered from Northern Paiute informants in the past and in the present. The discussion reflects a combination of very little specific knowledge but a broad awareness of the kinds of places, sites, resources and issues identified nearby and, in some cases, even within the study area.

One known resource of concern may be within the study area (Bengston 2002:Figure D5). However, properties of traditional religious and cultural importance may exist in the study area and may fit into one of the categories listed below or in others, yet to be identified.

Paleontological Use Categories

For purposes of management under terms of the NCA plan, a set of use categories similar to those applied to cultural resources is in effect.

a. **Scientific Use.** This category applies to any paleontological locality with known or potential vertebrate fossils or noteworthy occurrences of invertebrate or plant fossils available for consideration as the subject of scientific study at the present time, using currently available research techniques. Study includes methods that would result in the physical alteration or destruction of some, or all, of the locality. Recommendations to allocate individual localities to this use must be based on documentation of the kinds of scientific research potential the locality is known or thought to contain and the data's importance for pursuing specified research topics. Localities in this category need not be conserved in the face of a research or mitigation proposal that would make adequate and appropriate use of the locality's research importance.

Management Direction

Compliance Directives

1. Mitigation rather than avoidance is the preferred option. Mitigation must be accomplished prior to impacts from conflicting uses or natural or human caused deterioration, or is undertaken to ameliorate impacts that have already occurred. Mitigation may be accomplished by means of collection of data and fossil material, obtaining representative samples of fossils, avoidance, or no

action. Qualified persons holding a BLM-issued permit reflecting an accepted research design accomplish mitigation. Appropriate curation of specimens and records is required.

2. Monitoring during project development will be conducted at a level of intensity appropriate for the apparent sensitivity of the geologic unit or area being affected, based on results of analysis of existing data and/or field inventory.

Resource Management Directives

1. Resources in this category are available for testing and excavation by qualified researchers operating under valid permits with accepted research designs. Preference will be given to research proposals emphasizing priorities established in this plan. Resources in this category may be discharged from use once the locality has no further scientific use, or a resource in this category may be assigned to the Conservation for Future Use if determined appropriate based on results of scientific research.

a. **Conservation for Future Use.** This category is reserved for any unusual fossil locality, which because of scarcity, a research potential that surpasses the current state of the art, singular importance, scientific importance or comparable reasons, is not currently available for consideration as the subject of scientific study that would result in its physical alteration. A fossil locality included in this category is deemed worthy of segregation from all land or resource uses that would threaten the maintenance of its present condition, and will remain in this use category until specified provisions are met in the future.

Management Direction

Compliance Directives

1. Avoidance is the preferred mitigation measure. Discretionary activities will be denied within boundaries of these localities. The land on which these sites are situated is not available for disposal.

a. If avoidance is impossible, then mitigation will be allowed, per that described for mitigation under compliance for resources assigned to Scientific Use. Since the majority of the plan area is for National Conservation Area and Wilderness, we anticipate that avoidance will be possible in the vast majority of cases with uncontrolled erosion being the most likely cause of mitigation efforts.

Resource Management Directives

1. Sites in this category have the highest priority for protection and preservation and will not be available for other current uses, including research or interpretation.

a. A resource listed in the Conservation for Future Use category may be placed in another use management category if: (1) BLM identifies the specific criteria underlying this classification (for example, outstanding research potential), (2) the specific reasons for prohibitions or limitations are identified, and (3) BLM identifies or accepts methodological, technological or other criteria that if met or implemented justify alterations to the integrity of the resource and placement in another use category.

2. Protective actions, such as fencing, installation of erosion control structures, road closures, etc., may be taken to ensure preservation of those qualities providing the basis for classification. Resources in this use category will be monitored at least semi-annually to assess potential threats.

C. Discharged from Management. This category is assigned to fossil localities having either (1) no further scientific use or (2) are established through appropriate means of inventory and evaluation by qualified persons as having no potential for important vertebrate fossils or noteworthy occurrences of invertebrate or plant fossils. Properties discharged from management remain in the inventory, but they are removed from further management attention and do not constrain other land uses

Management Direction

Compliance Directives

1. With certain exceptions, appropriate formal analysis is required to place a fossil locality in this category. Common invertebrate fossils and locations of petrified wood are placed in this category, subject to certain exceptions that may be established to preserve unusual, rare or noteworthy examples. For paleontological localities, Discharged from Use means that management of these resources will be the same as for other rocks and minerals in the planning area.

Resource Management Directives

1. Common plant and invertebrate fossils and petrified wood are placed in this category, subject to certain exceptions that may be established to preserve unusual, rare or noteworthy examples. For Paleontological resources, Discharged from Use means that management of these resources will be the same as for other rocks and minerals in the planning area

D. Conservation/Scientific Use. This category is assigned to paleontological properties that are primarily valuable for conservation use, as defined in B above, and that may be used for scientific purposes, as defined in A above, that do not conflict with conservation use. Where conflicts exist in use, the directives associated with the primary use (Conservation) prevail.

Management Direction

Compliance Directives

1. Avoidance is the primary treatment action. Discretionary actions will be denied within the boundaries of the resource.

2. Where avoidance is not possible, data recovery, or other treatment is required.

Resource Management Directives

1. Sites in this category will be managed to avoid degradation from land uses and from natural processes. This can include implementation of actions such as fencing, construction of erosion control devices, road closures, etc.

2. Sites may be assigned to other uses after development of appropriate research or interpretation plans.

TABLE 1. USE CATEGORIES OF SITES

Non-Wilderness Planning Area Prehistoric Sites

Site Type	Use Category
Rock shelter	Scientific
w/ Rock Art	Scientific
w/ Packrat Midden	Scientific
Cave	Scientific
w/ Rock Art	Scientific
w/ Packrat Midden	Scientific
Occupation site (buried deposits)	Scientific
Occupation site (no buried deposits)	Scientific
Temporary camps	Scientific
Petroglyphs	Traditional/Scientific
Pictographs	Traditional/Scientific
Hunting blinds	Conservation
Opportunistic quarries	Experimental
Bedrock quarries	Public/Scientific
Prehistoric mineral sources	Traditional
Diagnostic lithic scatters	Scientific
Non-diagnostic lithic scatters	Discharged from Use
Cairns	Public
Traps	Public

Wilderness Prehistoric Sites

Site Type	Use Category
Rock shelter	Scientific
w/ Rock Art	Scientific
w/ Packrat Midden	Scientific
Cave	Scientific
w/ Rock Art	Scientific
w/ Packrat Midden	Scientific
Occupation site (w/ buried deposits)	Scientific
Occupation site (w/o buried deposits)	Scientific
Temporary camps	Scientific
Petroglyphs	Scientific /Traditional
Pictographs	Scientific/Traditional
Hunting blinds	Conservation
Opportunistic quarries	Experimental
Bedrock quarries	Scientific
Prehistoric mineral sources	Traditional
Diagnostic lithic scatters	Scientific
Non-diagnostic lithic scatters	Discharged from Use
Cairns	Conservation
Traps	Conservation

Non-Wilderness Planning Area--Likely Prehistoric Sites

Site Type	Use Category
Earth Surface Feature	Traditional/Scientific

Wilderness Area--Likely Prehistoric Sites

Site Type	Use Category
Earth Surface Feature	Traditional/Scientific

Non-Wilderness Planning Area Emigrant Trail Features

Trail Classification	Use Category
Class A	Public/ Conservation
Class B	Public/ Conservation
Class C	Public
Class D	Public
Class E	Public
Trail Sites	Public/Scientific

Wilderness Planning Area Emigrant Trail Features

Trail Classification	Use Category
Class A	Conservation
Class B	Conservation
Class C	Conservation
Class D	N/A
Class E	N/A
Trail Sites	Public/Scientific

Historic Sites in the Non-Wilderness Planning Area

Site Type	Use Category
Early Exploration	Conservation
Freight Roads	Public/Conservation
Railroad Sidings	Scientific
Railroad Construction	Conservation
Railroad Operations	Public
Telegraph/Telephone	Public/Scientific
Mining-Placer	Public/Scientific
Mining-Hardrock	Public/Scientific
Mining-Milling	Public/Scientific
Mining-Habitation	Public
Mining-Claims	Discharged
Homesteads-Standing Structures	Public
Homesteads-Ruins	Scientific
Ranching-Habitation (standing structures)	Public
Ranching-Habitation (ruins)	Scientific
Ranching-Water	Conservation
Ranching-Corrals (Standing)	Conservation/Public
Ranching-Corrals (Ruins)	Public
Ranching-Hay	Conservation
Ranching-horse trapping	Public
Ranching-Line camps (Standing Structures)	Public/Conservation
Ranching-Line camps (ruins)	Scientific
Ranching-Fences	Public/Scientific
Ranching-Transportation	Discharged from Use
Sheepherder Camps	Public
Bread Oven	Public
Hunting/Recreation Camps	Public
Historic Inscriptions	Public
Military-19th Century	Public

Site Type	Use Category
Military-20th Century	Public/Scientific
CCC	Public/Scientific
Cairns-Conquest	Discharged from Use
Cairns-Stone Men	Public
Murder Sites	Public/Conservation
Movie Production	Public/Conservation
Moonshine	Public/Scientific
Can Scatter	Discharge from Use
Associated Native American	Traditional/Scientific
Unassociated Native American	Traditional/Scientific
Native American-Combat	Public
PCRI	Traditional

Historic Sites in Wilderness

Site Type	Use Category
Early Exploration	Public/Scientific
Freight Roads	Public/Scientific
Mining-Placer	Experimental
Mining-Hardrock	Experimental
Mining-Milling	Experimental
Mining-Habitation	Scientific
Mining-Claims	Discharged
Homesteads	Experimental
Ranching-Water	Experimental
Ranching-Corrals	Experimental
Ranching-Hay	Experimental
Ranching-horse trapping	Experimental
Ranching-Line camps	Experimental
Ranching-Fences	Experimental
Sheepherder Camps	Experimental
Historic Inscriptions	Public/Scientific
Military-19th Century	Conservation/Scientific
Military-20th Century	Conservation/Scientific
CCC	Conservation/Scientific
Cairns-Conquest	Conservation/Scientific
Cairns-Stone Men	Public/Scientific
Moonshine	Public/Scientific
Can scatter	Discharge from Use
Associated Native American	Scientific
Unassociated Native American	Scientific
Native American-Combat	Scientific

Properties of Cultural and Religious Importance in the Entire Planning Area

Property Type	Use Category
Traditional Origin and Historic Sites	Traditional
Ceremonial Locations	Traditional
Ancestral Habitation Sites	Traditional/ Scientific
Trails	Traditional
Burial Sites	Traditional
Resource Collection Areas	Traditional/ Scientific
Sacred Sites	Traditional

Paleontological Resources in the Entire Planning Area

Resource Type	Use Category
Petrified Wood	Discharged from Use
Plant and Invertebrate Fossils (Common)	Discharged from Use
Plant and Invertebrate Fossils (Rare)	Scientific
Vertebrate Fossils	Scientific

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Appendix G: Explanation of Minimum Requirement and Minimum Tool Analysis

Wilderness managers often speak of "minimum required" or "minimum tool". The terms are shorthand for the provisions found in section 4(c) of the Wilderness Act.

Section 4 (c) of the Act prohibits certain activities in wilderness by the public and, at the same time, allows the agencies to engage in those activities in some situations. Section 4 (c) states:

> *"… except as necessary to meet minimum requirements for the administration of the area for the purpose of this Act (including measures required in emergencies involving the health and safety of persons within the area), there shall be no temporary road, no use of motor vehicles, motorized equipment or motorboats, no landing of aircraft, no other form of mechanical transport, and no structure or installation within any such area."*

In the above language, Congress acknowledged that even though certain activities are prohibited, there are times when exceptions to these prohibitions will need to be made for administration of the area. However, from the regulations, special orders, and internal agency policy, it is clear that the wilderness management agencies should not view the language in Section 4 (c) as blanket approval to conduct projects or allow activities without an analysis of (1) whether the project or activity is necessary to meet the minimum requirements for the administration of the area, and (2) which tool or method should be used to complete the project that results in the least impact to the physical resource or wilderness values.

Agency employees entrusted with management of wilderness should set the highest standard possible when reviewing management practices in wilderness. Wilderness is intended to be managed differently from other public lands and this difference needs to be demonstrated to the public.

The minimum requirement analysis is used to determine what is the least impacting way of administering the wilderness. The wilderness manager may authorize any of the generally prohibited activities or uses listed in Sec. 4(c) of the Wilderness Act if they are determined to be the minimum necessary to do the job and meet wilderness management objectives.

When conducting the actual minimum requirement analysis wilderness managers generally follow these steps:

1. Complete a minimum requirement analysis, for all proposed projects or activities. This step should not be used to justify use of motorized equipment or mechanical transport, but rather, to scrutinize the project or activity and make the best decision for wilderness in the long term. To determine if the proposal truly is required for the administration of the wilderness area, managers need to answer the following questions:
   a. Is there an emergency?
   b. Does the project conflict with stated wilderness goals, objectives and desired future conditions of applicable legislation, policy, and management plans?
   c. Are there any less intrusive actions that should be tried first?
   d. Can this project be accomplished outside of wilderness and still meet it's objectives?
   e. Is the project subject to valid existing rights?
   f. Is there a special provision in the enabling legislation that allows for the proposal?
   g. How does the proposal benefit wilderness as a whole?
   h. If this project were not completed, how would the wilderness characteristics of naturalness, solitude, primitive recreation and special features be impacted?
   i. How would the project ensure that human presence is kept to a minimum?

j. How would the project ensure that the wilderness provides opportunities for solitude or primitive recreation?
k. How did you consider wilderness values over convenience, comfort, political, economic or commercial values while evaluating this project or activity?

2. If after completing step one, the proposal is found to be the minimum required action for administration of the area as wilderness, the wilderness manager needs to complete a minimum tool analysis. The minimum tool analysis is used to determine which method of implementing the proposal would have the least impact on the wilderness resource while still allowing the project to be completed safely and successfully. Generally at least three alternatives are evaluated in the minimum tool analysis; an alternative using non-motorized, non-mechanized equipment, an alternative using motorized and/or mechanized equipment, and one alterative using a combination of the methods. Impacts to naturalness, solitude, primitive recreation and special features are evaluated for each alternative. That method that has the least impact on the wilderness resource and allows the project to be successful is determined to be the minimum tool.

If the analysis shows a justifiable need for motorized equipment, it is important to have this analysis in writing to provide to the official(s) who can authorize the use of mechanical transport or motorized equipment in wilderness. For some units, this analysis may become an integral part of an environmental analysis required to document a decision to use motorized equipment.

Ongoing management practices, especially if they involve mechanical transport, motorized equipment, or structures, should be reviewed to determine if they are still necessary or the best way to complete the task at hand.

The Wilderness Management Plan, to be prepared after the RMP, will contain minimum required and minimum tool analysis for specific management actions dealing with wildlife, grazing operations, fire suppression and other resources in the wilderness areas.

Appendix H: BLM and NDOW MOU Regarding Wildlife Management in Wilderness

BLM MOU 6300-NV930-0402

MEMORANDUM OF UNDERSTANDING

Between

THE BUREAU OF LAND MANAGEMENT

AND

THE NEVADA DEPARTMENT OF WILDLIFE

Supplement No. 9

Wildlife Management in Nevada BLM Wilderness Areas

I. Purpose.

The purpose of this Memorandum of Understanding (MOU) is to provide guidance and procedures for coordination and cooperation between the Bureau of Land Management (BLM) and the Nevada Division of Wildlife (NDOW) regarding the management of wildlife in designated BLM Wilderness Areas within the State of Nevada.

II. Objective.

The BLM and the NDOW are committed to the maintenance and restoration of fish and wildlife populations and habitats in Nevada within the jurisdictions of their respective agencies. Coordination and cooperation between the BLM and the NDOW, where jurisdictions involve designated Wilderness, is essential in order that BLM and NDOW

may accomplish their respective missions relating to management of fish and wildlife and their habitats as well as the Congressional mandate to manage Wilderness Areas under the Wilderness Act of 1964.

III. Authorities.

A. Section 307(b) of the *Federal Land Policy and Management Act of 1976*, 43 U.S.C. 1737.

B. Nevada Revised Statutes 501.181.

C. *The Wilderness Act of 1964* (P.L. 88-577), 16 U.S.C. 1131-1136.

D. *Nevada Wilderness Protection Act of 1989* (P.L. 101-195).

E. *Black Rock Desert – High Rock Canyon Emigrant Trails National Conservation Act of 2000* (P.L. 106-554) as amended by P.L. 107-63 of 2001.

F. *Clark County Conservation of Public Land and Natural Resources Act of 2002* (P.L. 107-282).

G. *Sikes Act of 1960*, as amended, (P.L. 86-797), 16 U.S.C. 670g-6701, 670o.

H. Congressional Wildlife Management Guidelines agreed to by the International Association of Fish and Wildlife Agencies, the Wildlife Management Institute, the BLM, and the USFS, approved by the House Committee on Interior and Insular Affairs, and adopted as policy by the BLM on August 25, 1986 in Instruction Memorandum 86-665 and by the USFS in Forest Service Manual 2323.32.

I. Resolution of the Nevada Board of Wildlife Commissioners concerning Wilderness Designations in Nevada adopted February 7, 2003.

IV. Definitions.

A. *Exotic Species*: For purposes of this MOU, all species of mammals, birds, fish, reptiles or their progeny or eggs, not naturally occurring either presently or historically in any ecosystem of the United States.

B. *Endemic or Indigenous Species*: For purposes of this MOU, those species presently or historically occurring naturally within a specific geographical area.

C. *Native Species*: For purposes of this MOU, all species of animals naturally occurring, either presently or historically, in any ecosystem of the United States.

D. *Naturalized Species*: For purposes of this MOU, those exotic species which were already occurring in a self-sustaining wild state before the date of Wilderness designation.

V. The BLM and NDOW Agree to the Following.

Fish and wildlife are recognized as an important wilderness value. Fish and wildlife management activities in Nevada's BLM Wilderness Areas will be planned and carried out in conformance with the Wilderness Act's purpose of securing an "enduring resource of wilderness" for the American people. BLM Wilderness Areas in Nevada will be managed in such a manner that ecosystems are unaffected by human manipulation, and human influence does not impede the free play of natural forces or interfere with natural ecological succession.

Site-specific, time-sensitive, on-the-ground conditions will dictate slightly different applications and perhaps even dissimilar decisions in BLM Wilderness Areas in Nevada. These different applications and decisions are both appropriate and proper, if we are to allow nature to play the dominant role in wilderness management. The emphasis is on management of BLM Wilderness Areas and wilderness values as opposed to the management of a particular resource. Where there are competing resource alternatives, wilderness values take precedence and priority.

Italicized paragraphs in this section of the MOU contain language and guidance that is exclusive to the *Clark County Conservation of Public Land and Natural Resources Act of 2002*.

A. Use of Motorized Equipment

The language in the Wilderness Act is viewed as direction that all management activities within BLM Wilderness in Nevada be done without motor vehicles, landing of aircraft, motorized equipment, or mechanical transport, unless truly necessary to administer the area as Wilderness. With regard to landing of aircraft, it is also against BLM regulation to drop or pick up materials, supplies, or persons from aircraft. Where the use of aircraft and motorboats have already become established prior to wilderness designation, they may be permitted to continue subject to such restrictions as the BLM deems desirable. The language in the Wilderness Act means that any such use should be rare and temporary, that no roads can be built, and that wilderness managers must determine such use is the minimum

necessary to accomplish the task. Any on-the-ground use of motorized equipment or mechanical transport requires advance approval by the BLM.

In Clark County, the BLM, in consultation with the NDOW, must determine if the use of motor vehicles, motorized equipment, or mechanical transport in the development and /or implementation of a project would promote healthy, viable, and more naturally distributed wildlife populations that would enhance wilderness values and accomplish those purposes with the minimum impact to wilderness values necessary to reasonably accomplish the task.

B. Fish and Wildlife Research and Management Surveys

Research on fish and wildlife, their habitats and the recreational users of these resources is a legitimate activity in Nevada BLM Wilderness Areas when conducted in a manner compatible with the preservation of the wilderness environment. Methods that temporarily infringe on the wilderness environment may be approved by the BLM if alternative methods or locations outside wilderness are not available. Methods that involve dropping or picking up of any materials, supplies, or persons by means of aircraft require BLM approval. Methods that involve the use of aircraft that fly over but do not touch down in Wilderness, such as aerial surveillance and aerial wildlife population counts, do not require BLM approval. Aircraft must be used in a manner that minimizes disturbance of other users, including humans and wildlife. Consider time of day, season of the year, route, appropriate maximum altitude of flight, and location of landing areas outside BLM Wilderness Areas.

All fish and wildlife studies within and over Nevada BLM Wilderness Areas must be conducted so as to preserve the natural character of the Wilderness. Capturing and marking of animals, radio telemetry, and occasional temporary installations may be permitted, if they are essential to studies that cannot be accomplished elsewhere. Installation of permanent base stations within BLM Wilderness is not permitted for monitoring of radio-instrumented animals.

The NDOW must obtain specific written approval or permits from the BLM before erecting any temporary installation. The BLM should only approve capture methods that minimize the impact on the wilderness environment.

C. Facility Development and Habitat Alteration

In rare instances, facility development and habitat alteration may be necessary to alleviate adverse impacts caused by human activities on fish and wildlife. Give first priority to locating facilities or habitat alterations outside BLM Wilderness Areas.

Flow-maintenance dams, water developments, water diversion devices, ditches and associated structures, and other fish and wildlife habitat developments necessary for fish and wildlife management, which were in existence before wilderness designation, may be permitted to remain in operation. These developments may be maintained, repaired, or replaced as long as the designed capacity and/or dimensions of the existing development are not exceeded. The BLM and the NDOW will jointly make decisions to remove existing water-related developments.

Clearing of debris that impedes the migratory movements of fish on primary spawning streams may be permitted, but only in a manner compatible with the wilderness resource. Use only nonmotorized equipment to clear debris and use explosives only when the use of hand tools is not practical. Limit clearing of debris from spawning streams to those identified as being critical to the propagation of fish. If it is necessary to restore essential food plants after human disturbance, use only indigenous plant species.

Development of new or additional water supplies may be permitted, but only when essential to preserve the wilderness resource and to correct unnatural conditions resulting from human influence. Proposals for new structures or habitat alterations must be submitted to the BLM for approval.

In Clark County, the BLM shall authorize structures and facilities if: (1) the structures and facilities will, as determined by the BLM, enhance wilderness values by promoting healthy, viable and more naturally distributed wildlife populations; and (2) the visual impacts of the structures and facilities on the BLM Wilderness Areas can reasonably be minimized.

D. Threatened and Endangered Species

Actions necessary to protect or recover Federally listed threatened or endangered species, including habitat manipulation and special protection measures as identified in threatened and endangered species recovery plans or other management agreements, may be implemented in Nevada BLM Wilderness Areas in previously occupied habitat, provided it is demonstrated that the actions cannot be done more effectively outside Wilderness. To prevent Federal listing, protect indigenous species that could become threatened or endangered or are listed as such by the State of Nevada. All transplants or habitat improvement projects require approval by the BLM.

E. Angling, Hunting, and Trapping

Angling, hunting, and trapping are legitimate wilderness activities subject to applicable State and Federal laws and regulations.

In Clark County, the BLM may, in coordination and consultation with the NDOW, designate by regulation, areas and periods during which no hunting, fishing, or trapping will be permitted in BLM Wilderness Areas for reasons of public safety, administration, or compliance with applicable laws.

F. Population Sampling

Scientific sampling of fish and wildlife populations is an essential procedure in the protection of natural populations in Nevada's BLM Wilderness Areas. Gill netting, battery-operated electrofishing, and other standard techniques of population sampling may be used. Closely coordinate sampling activities with the BLM and schedule them to avoid heavy public-use periods.

G. Chemical Treatment

Chemical treatment may be necessary to prepare waters for reestablishment of indigenous fish species, to protect or recover Federally listed threatened or endangered species, or to correct undesirable conditions resulting from the influence of man. Species of fish traditionally stocked before wilderness designation may be considered indigenous if the species is likely to survive. Use only registered piscicides, in consultation with the BLM, and according to label directions. Give preference to those piscicides that will have the least impact on non-target species and on the wilderness environment. NDOW will comply with Environmental Protection Agency processes delegated to the Nevada Division of Environmental Protection in attainment of permits and certifications of personnel applying chemicals to Nevada's waters within BLM Wilderness Areas. Schedule chemical treatments during periods of low human use and immediately dispose of fish in a manner agreed to by the BLM and the NDOW.

H. Spawn-Taking

The collection of fish spawn shall be permitted in Nevada BLM Wilderness Areas when alternative sources outside Wilderness Areas are unavailable or unreliable, or where spawn-taking was an established practice before wilderness designation. Use of techniques and facilities necessary to take and remove spawn, which were in existence before wilderness designation, may continue, except that motorized equipment will not be used. Facilities for spawn-taking stations approved by the BLM after wilderness designation must be removed after the termination of each season's operation. Decisions to prohibit spawn-taking, where it was an established practice

before wilderness designation, will be made jointly by the BLM and the NDOW.

I. Fish Stocking

Fish stocking may be conducted by the NDOW in coordination with the BLM, using means appropriate for wilderness, when either of the following criteria is met: (1) to reestablish or maintain an indigenous species adversely affected by human influence; or (2) to perpetuate or recover a threatened or endangered species. NDOW, in consultation with the BLM, will select the indigenous or naturalized fish species for stocking. Species of fish traditionally stocked before wilderness designation may be considered indigenous if the species is likely to survive. Exotic species of fish shall not be stocked. Numbers and size of fish and time of stocking will be determined by the NDOW. Barren lakes and streams may be considered for stocking, if there is mutual agreement that no appreciable loss of scientific values or adverse effects on wilderness resources will occur. The BLM and NDOW will inventory barren lakes, streams and other suitable waters prior to proposing such stocking projects.

J. Aerial Fish Stocking

Aerial stocking of fish shall be allowed for those waters in Nevada BLM Wilderness Areas where this was an established practice before wilderness designation or where other practical means are not available. Aerial stocking requires consultation with the BLM. The NDOW will supply the BLM a list of those waters where stocking with aircraft was an established practice before wilderness designation. To stock waters that had not been aerially stocked before wilderness designation, the NDOW will demonstrate to the BLM the need for using aircraft.

K. Transplanting Wildlife

Transplants (i.e., removal or reintroduction of terrestrial wildlife species in Nevada BLM Wilderness Areas) may be permitted if necessary: (1) to perpetuate or recover a threatened or endangered species; or (2) to restore the population of indigenous species eliminated or reduced by human influence. Investigate the possibility of utilizing sites and locations outside BLM Wilderness Areas first. If sites and locations outside BLM Wilderness Areas are not available, transplants shall be made in a manner compatible with the wilderness character of the area. Transplant projects, including follow-up monitoring, require advance written approval from the BLM, if the action requires ground disturbing activities, motorized methods, and/or temporary holding and handling facilities.

L. Wildlife Damage Control

Wildlife damage control in Nevada BLM Wilderness Areas may be necessary to protect Federally listed threatened or endangered species, to prevent transmission of diseases or parasites affecting other wildlife and humans, for the management of reintroduced indigenous wildlife species, or to prevent serious losses of domestic livestock. Control of nonindigenous species also may be necessary to reduce conflicts with indigenous species. Acceptable control measures include lethal and nonlethal methods, depending upon need, justification, location, conditions, efficiency and applicability of State and Federal laws. These control measures must be consistent with Section 4(c) of the Wilderness Act of 1964 to insure that prohibited uses are avoided. Use only the minimum amount of control necessary to resolve wildlife damage problems. The Animal and Plant Health Inspection Service, the BLM, the NDOW, or other approved State agency will implement control measures pursuant to cooperative agreements or memoranda of understanding. Wildlife damage control measures involving the use of motorized vehicles, motorized equipment, and/or mechanical transport must be approved by the BLM on a case-by-case basis.

M. Visitor Management to Protect Wilderness Wildlife Resources

When necessary to reduce human disturbance to wildlife populations or habitat, the BLM, in coordination and consultation with the NDOW, may take direct or indirect management actions to control visitor use. If and when it becomes apparent that public use is significantly degrading the wilderness wildlife resources, limitations on visitor use may be imposed and enforced by the appropriate agency.

VI. Annual Operations and Maintenance Schedule.

By January 15th of each year, the NDOW will submit to the appropriate BLM Field Office Manager(s) an annual Operations and Maintenance Schedule of proposed fish and wildlife management activities, projects and developments planned within BLM Wilderness Areas for the subsequent twelve-month period beginning July 1st and ending on June 30th of the following year. Activities, projects and developments must be submitted, with the exception of specifically identified actions in this MOU, if they: (1) involve one or more of the prohibited uses identified in Section 4(c) of the Wilderness Act (i.e., commercial uses, permanent roads, temporary roads, use of motor vehicles, use of motorized equipment, use of motorboats, landing of aircraft, mechanical transportation, structures, installations); (2) may be potentially surface-disturbing (i.e., any new disruption of the soil or vegetation); (3) involve the use of pesticides or other chemical or toxic substances; (4) involve manipulation of fish and wildlife habitat; and/or (5) involve mechanized and/or motorized control measures for predators or problem fish or wildlife species.

Annual Operations and Maintenance Schedules must be site-specific, time-sensitive, and be as definitive as reasonably possible. The Schedules will: (1) specify when proposed activities, projects and developments are planned for accomplishment, (2) describe the proposed activities, projects and developments in sufficient detail to allow for the assessment of the environmental consequences of such actions, (3) estimate the number of people involved, the amount of time for completion, the number of vehicles (if any) to be used, the equipment to be utilized, and (4) identify planned camping sites, material and equipment repositories, landing areas, and associated locations for support services and facilities. The BLM may request clarification of proposals and additional information.

The NDOW agrees to notify the BLM of any changes, additions or deletions to proposed activities, projects and developments. The notification will allow sufficient time for the BLM to complete necessary administrative requirements, such as public notification and environmental review. The BLM recognizes that accomplishment of the proposed fish and wildlife management activities, projects, and developments depends on factors which the NDOW may not control or that are uncertain and subject to change. Among these are the weather, availability of volunteers and agents, funding, etc., which may not permit the NDOW to complete activities, projects and developments according to the annual Operations and Maintenance Schedule.

VII. Immediate Actions and Procedures.

Actions requiring immediate attention due to unanticipated natural or human-caused circumstances (e.g., flood, vandalism, sick animal), that directly and immediately jeopardize the survival of fish and wildlife under the NDOW's jurisdiction, may be permitted if the following procedure is adhered to: (1) The NDOW agrees to notify the appropriate BLM Field Office Manager as soon as practicable after the problem is known; (2) The NDOW agrees to use no more than the "minimum tool" level of motorized vehicle, mechanical transport and/or motorized equipment necessary and practical to rectify the situation; and (3) The NDOW agrees to submit to the wilderness management agency a written assessment of the action requiring immediate attention within two weeks after resolution of the situation.

To the extent feasible, the NDOW will submit as part of their annual Operations and Maintenance Schedule, immediate action scenarios that may be possible or probable in connection with a given proposed activity, project or development. In doing so, the wilderness management agencies will then be in a position to analyze potential impacts to wilderness resources in advance of occurrence.

VIII. Process for Analyzing Proposed Projects/Activities and Approval Authorities.

Proposed fish and wildlife management activities, projects and developments submitted in the annual Operations and Maintenance Plan require permissions, approvals, and/or

permits from the BLM and will be processed and approved in accordance with the following procedure:

A. NDOW Annual Operations and Maintenance Schedule

1. Site-specific, time-sensitive, written proposals for wildlife management projects, developments and activities within BLM Wilderness Areas shall be developed in consultation with Field Managers and their staffs before they are proposed in the Annual Operations and Maintenance Schedule.

2. The NDOW Regional Habitat Supervisors are responsible for the development, coordination and submission of the Annual Operations and Maintenance Schedules to the BLM.

B. BLM Analysis of Projects and Approval Authorities

1. Site-specific, time-sensitive, written proposals for wildlife management projects, developments and activities within BLM Wilderness Areas shall be submitted in the annual Operations and Maintenance Plan to the appropriate Field Office Manager for consideration.

2. The BLM will provide written notification of proposals to interested and affected publics and allow these publics at least 30 days to offer comments, questions, concerns and alternatives. Public responses will be sent to the Field Office Manager.

3. Field Office Managers and their staffs will then complete and document "minimum requirement decision" and "minimum tool" analyses and appropriate National Environmental Policy Act compliance, before making a final decision.

4. Once the Field Office Area Manager makes a final decision, copies of the decision are mailed to all interested and affected parties. Decisions to allow a wildlife management project, development, or activity within a BLM Wilderness Area require permissions, approvals, and/or permits from the Field Office Manager. If the NDOW disagrees with a decision of the Field Office Manager, the decision may be reviewed by the Nevada State Director. All decisions can be appealed to the Interior Board of Land Appeals.

IX. Administration.

A. Nothing in this MOU will be construed as affecting the authorities of the BLM or the NDOW or as binding beyond their respective authorities, or

to require the BLM or the NDOW to obligate or expend funds in excess of available funds.

B. Conflicts among the BLM and the NDOW concerning processes or procedures under this MOU that cannot be resolved at the operational level will be referred to successively higher levels, as necessary, for resolution.

C. The BLM and the NDOW will review this MOU at least every five years to determine its adequacy, effectiveness and appropriateness.

D. The terms of this MOU may be renegotiated at any time at the initiative of the BLM or the NDOW, following at least 30 days notice to the other agency.

E. The BLM or the NDOW may cancel this MOU at any time, following at least 30 days notice to the other agency.

F. The BLM or NDOW may propose changes to this MOU during its term. Such changes will be in the form of an amendment and will become effective upon signature by both agencies.

G. Before this MOU is due to expire, if the BLM and NDOW agree that there is a continuing need, it may be extended or renewed.

H. This MOU will become effective upon signature of both agencies.

APPROVED:

Robert V. Abbey, Nevada State Director
Bureau of Land Management

On 12·1·03
Date

Terry R. Crawforth, Director
Nevada Department of Wildlife

On 11-25-03
Date

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Appendix I: Wildland Fire Appropriate Management Response and Wildland Fire Suppression Guidelines

Wildland Fire Appropriate Management Response

Use of appropriate management response (AMR) on all wildland fire allows agency administrators the ability to choose from a full spectrum of fire suppression actions. Although all wildland fires must have an appropriate action taken to suppress them, not all wildfires need to be suppressed with the same level of intensity. Appropriate suppression actions, whether aggressive, high intensity or low intensity actions, will be based on preplanned analysis and executed to minimize suppression costs plus resource losses, consistent with land management objectives, including the threat to life and property.

Preplanned analysis criteria has been identified through the Phase One Fire Management Planning Process (see glossary) in which an interdisciplinary team of resource, fire, and line management representatives classified public land into the two different management categories listed as follows:

Category A

Those lands where wildland fire should be excluded; using only prescribed fire or non-fire treatment techniques to achieve the desired resource conditions or management of the area. The appropriate management response for these lands will be full suppression. In multiple fire situations, with fires occurring within both land categories, suppression priorities will be given to those fires burning within this classification of land. When multiple fires occur within Category A, suppression priority will be based on the threat or potential threat to public safety, structures, private property, and improvements.

Criteria used to determine Category A land include:

- Protecting public safety;
- Threat to private land;
- Protecting capital improvements;
- Protecting administrative/recreational sites;
- Minimizing loss of shrub cover and biological soil crusts;
- Minimizing increase in annual vegetation types;
- Limiting or reducing medusahead, cheatgrass, and other noxious species;
- Providing diverse perennial species;
- Protecting habitat for special status plant species;
- Protecting Federal and State lands identified under fire protection agreements.

Category B

Those lands where wildland fire could/should be used in addition to prescribed fire to meet desired resource conditions or management. Under this category of land the appropriate management response could vary based on predetermined fire and resource criteria (see criteria below) for land in and adjacent to the fire location. In multiple fire situations, Category A land will, with the exception of threat to life, receive higher priority for suppression actions than will Category B land.

While all wildland fires will receive a suppression response, that response will not always be full suppression. Less than full suppression responses will occur only during spring early or late summer and fall months, dependant on weather conditions, or in multiple fire situations when suppression forces are not adequate to respond to all going fires. With multiple fires burning, suppression actions will occur in order of priority, with lower priority fires receiving suppression action as forces become available. All other fires receiving less than full suppression actions must meet the following fire criteria thresholds:

- Fire located within Category B land;
- Live fuel moisture in big sagebrush at 120 percent or more with 10-hour fuel stick readings of 5 percent or above or live fuels of 95 percent or above and 10-hour fuel stick reading of 8 percent or above;
- Predicted, maximum sustained wind speed of 10 mph (obtained from fire weather forecast);
- Observed and predicted fire behavior will continue to meet resource management objectives;
- No threat to public safety;
- Not a threat to private, State or other Federal land (unless those lands are under a signed mutual agreement with the landowner or agency for less than full suppression actions);
- Fires ignition is not suspected to be arson;
- Actions are in accordance with the "Preparedness Level 3" or less of the local unit (this level is based on the number of fire suppression resources that are committed to ongoing fire suppression activities, as more resources are committed the level raises).

If any of these criteria are exceeded the appropriate management response becomes that of full suppression, with the only exception to this occurring in a multiple fire situation where suppression actions are based on priority.

Within Category B, land resource considerations will be addressed and updated annually to reflect appropriate changes in the values to be protected. Resource criteria has been identified as to those criteria which may lead to full suppression actions and those criteria which may lead to less than full suppression actions, those criteria include but are not limited to the following.

Resource criteria that may lead to full suppression action include but are not limited to:

- Burning vegetation resources with commodity values;
- Burning within the perimeter of an area burned within the last 10 years;
- Burning within the perimeter of a fire rehabilitation area;
- Burning within sensitive vegetation types/habitat (key winter range, annual grasslands, shrub/annual grassland, rabbit brush/grassland, or salt desert shrub); and
- Burning more than one-third of a 5^{th} code watershed in a 3-year period.

Resource criteria that may lead to less than full suppression actions include but are not limited to:

- Burning within riparian areas;
- Burning within designated ACEC/RNA areas (allow to monitor natural processes);
- Burning within a wilderness or wilderness study area;
- Burning within given vegetation types (juniper, aspen, mountain big sagebrush, mountain brush);
- Burning at 5,500 feet elevation or above (vegetation communities capable of natural rehabilitation); or
- Burning within an area that has a prescribed fire plan in place.

The authorized officer (field manager or designated representative) has the authority to modify fire and resource criteria for either category of land based on site-specific resource management objectives identified through the adaptive management process.

General Suppression Guidelines for the NCA/Wilderness

- A Resource Advisor will be dispatched to all fires occurring in or threatening the NCA or Wilderness Areas

- Use of heavy equipment (bulldozers, etc..) will only be used in the NCA or Wilderness Areas if the fire is threatening human life or property. The Field Manger must approve the use of heavy equipment in all cases.

- Air resources including helicopters, smokejumpers, and air tankers will be included in the WILDCAD system for all NCA and Wilderness fire suppression activities.

- Use of retardant must be approved by the Field Manager, if retardant is not approved water may be dropped from retardant aircraft.

- All fire suppression activities will use Minimum Impact Suppression Techniques (MIST) at all times.

- Hand crews may use conventional hand tools and may conservatively use chain saws for fire line construction. Chain saw use and line width should be kept to a minimum. Utilization of existing natural barriers, minimum "scratch line", and cold trailing is encouraged where feasible. Handline construction will be rehabilitated back to the natural contour.

- A "Leave No Trace" policy will be used in the NCA and Wilderness Areas. All evidence of human activity must be removed, to the maximum extent possible.

- Heavy equipment could be used in the emigrant trail corridor subject to:
    - No blading will be allowed on roads or trails
    - Transport of equipment through the corridor will be allowed on Class C trail segments with the approval of a qualified resource advisor. Transport of equipment will be allowed on Class D and E trail segments.
    - Blading of firelines within the immediate viewshed could be allowed to protect property and life when no other options are available and approved by the resource advisor. Any blading will be followed by immediate stabilization and subsequent restoration of disturbed soils, vegetation and visual quality.

Wilderness Specific Suppression Guidelines

- If motorized vehicle use is authorized in fire suppression efforts in Wilderness it will remain on predetermined existing ways inside.

- Helibases, staging areas, and fire camps will be located outside of the Wilderness Areas, unless it is authorized by the Resource Advisor.

- Landing of helicopters will be kept to a minimum and will only occur in existing openings.

Minimum Impact Suppression Tactic (MIST) Guidelines

MINIMUM IMPACT SUPPRESSION TACTICS (MIST) GUIDELINES

Fire management requires the fire manager and firefighter to select management tactics commensurate with the fire's potential or existing behavior while producing the least possible impact on the resource being protected. The term used to describe these tactics is "Minimum Impact Suppression Tactics", commonly called MIST. Simply put: MIST is a 'do least damage' philosophy.

MIST is not intended to represent a separate or distinct classification of firefighting tactics but rather a mind set - how to suppress a wildfire while minimizing the long-term effects of the suppression action. MIST is the concept of using the minimum tool to safely and effectively accomplish the task. MIST should be considered for application on all fires in all types of land management.

While MIST emphasizes suppressing wildland fire with the least impact to the land, actual fire conditions and good judgment will dictate the actions taken. Consider what is necessary to halt fire spread and containment within the fireline or designated perimeter boundary, while safely managing the incident.

Use of MIST will not compromise firefighter safety or the effectiveness of suppression efforts. Safety zones and escape routes will be a factor in determining fireline location

Accomplishments of minimum impact fire management techniques originate with instructions that are understandable, stated in measurable terms, and communicated both verbally and in writing. They are ensured by monitoring results on the ground. Evaluation of these tactics both during and after implementation will further the understanding and achievement of good land stewardship ethics during fire management activities.

The intent of this guide is to serve as a checklist for all fire management personnel.

INCIDENT MANAGEMENT CONSIDERATIONS

Fire managers and firefighters select tactics that have minimal impact to values at risk. These values are identified in approved Land or Resource Management Plans. Standards and guidelines are then tied to implementation practices which result from approved Fire Management Plans.

- Firefighter and public safety cannot be compromised.
- Evaluate suppression tactics during planning and strategy sessions to ensure they meet agency administrator objectives and MIST. Include agency Resource Advisor and/or designated representative.
- Communicate MIST where applicable during briefings and implement during all phases of operations.
- Evaluate the feasibility of Wildland Fire Use in conjunction with MIST when appropriate for achieving resource benefits.

Agency Administrator or Designee

- Ensure agency personnel are provided with appropriate MIST training and informational/educational materials at all levels.
- Communicate land and fire management objectives to Incident Commander.
- Periodically monitor incident to ensure resource objectives are met.
- Participate in incident debriefing and assist in evaluation of performance related to MIST.

Incident Commander

- Communicate land and fire management objectives to general staff.
- Evaluate suppression tactics during planning and strategy sessions to see that they meet the Agency Administrator's objectives and MIST guidelines.

- Monitor operations to ensure MIST is implemented during line construction as well as other resource disturbing activities.
- Include agency Resource Advisor and/or local representative during planning, strategy, and debriefing sessions.

Resource Advisor

- Ensure interpretation and implementation of WFSA/WFIP and other oral or written line officer direction is adequately carried out.
- Participate in planning/strategy sessions and attend daily briefings to communicate resource concerns and management expectations.
- Review Incident Action Plans (IAP) and provide specific direction and guidelines as needed.
- Monitor on the ground applications of MIST.
- Provide assistance in updating WFSA/WFIP when necessary.
- Participate in debriefing and assist in evaluation of performance related to MIST.

Planning Section

- Use Resource Advisor to help assess that management tactics are commensurate with land/resource and incident objectives.
- Ensure that instructions and specifications for MIST are communicated clearly in the IAP.
- Anticipate fire behavior and ensure all instructions can be implemented safely.

Logistics Section

- Ensure actions performed around Incident Command Post (ICP), staging areas, camps, helibases, and helispots result in minimum impact on the environment.

Operations Section

- Evaluate MIST objectives to incorporate into daily operations and IAP.
- Monitor effectiveness of suppression tactics in minimizing impacts to resources and recommend necessary changes during planning/strategy sessions.
- Communicate MIST to Division Supervisors and Air Ops/Support during each operational period briefing. Explain expectations for instructions listed in Incident Action Plan.
- Participate in incident debriefing and assist in evaluation of performance related to MIST.

Division/Group Supervisor and Strike Team/Task Force Leader

- Communicate MIST objectives and tactics to single resource bosses.
- Recommend specific tasks on divisions to implement MIST.
- Monitor effectiveness of suppression tactics in minimizing impacts to resources and recommend necessary changes to Operations Section Chief.

Single Resource Bosses

- Communicate MIST objectives to crew members.
- Monitor work to ensure that crews are adhering to MIST guidelines and specific incident objectives.
- Provide feedback to supervisor on implementation of MIST.

IMPLEMENTATION

Keep this question in mind: What creates the greater impact, the fire suppression effort or the fire?

Safety

- Apply principles of LCES to all planned actions.
- Constantly review and apply the 18 Watch Out Situations and 10 Standard Fire Orders.
- Be particularly cautious with:
  - Burning snags allowed to burn.
  - Burning or partially burned live and dead trees.
  - Unburned fuel between you and the fire.

Escape Routes and Safety Zones

- In any situation, the best escape routes and safety zones are those that already exist. Identifying natural openings, existing roads and trails and taking advantage of safe black will always be a preferred tactic compatible with MIST. If safety zones must be created, follow guidelines similar to those for helispot construction.
- Constructed escape routes and safety zones in heavier fuels will have a greater impact, be more time consuming, labor intensive and ultimately less safe.

General Considerations

- Consider the potential for introduction of noxious weeds and mitigate by removing weed seed from vehicles, personal gear, cargo nets, etc.
- Consider impacts to riparian areas when siting water handling operations.
  - Use longer draft hoses to place pumps out of sensitive riparian areas.
  - Plan travel routes for filling bladder bags to avoid sensitive riparian areas.
- Ensure adequate spill containment at fuel transfer sites and pump locations. Stage spill containment kits at the incident.

Fire Lining Phase

- Select tactics, tools, and equipment that least impact the environment.
- Give serious consideration to use of water or foam as a firelining tactic.
- Use alternative mechanized equipment such as excavators and rubber tired skidders rather than bulldozers when constructing mechanical line.
- Allow fire to burn to natural barriers and existing roads and trails.
- Monitor and patrol firelines to ensure continued effectiveness.

Ground Fuels

- Use cold-trail, wet line or combination when appropriate. If constructed fireline is necessary, use minimum width and depth to stop fire spread.
- Consider the use of fireline explosives (FLE) for line construction and snag falling to create more natural appearing firelines and stumps.
- Burn out and use low impact tools like swatters and gunny sacks.
- Minimize bucking to establish fireline: preferably move or roll downed material out of the intended constructed fireline area. If moving or rolling out is not possible, or the downed log/bole is already on fire, build line around it and let the material be consumed.

Aerial fuels–brush, trees, and snags:

- Adjacent to fireline: limb only enough to prevent additional fire spread.
- Inside fireline: remove or limb only those fuels which would have potential to spread fire outside the fireline.
- Cut brush or small trees necessary for fireline construction flush to the ground.
- Trees, burned trees, and snags:
  - Minimize cutting of trees, burned trees, and snags.
  - Do not cut live trees unless it is determined they will cause fire spread across the fireline or seriously endanger workers. Cut stumps flush with the ground.
  - Scrape around tree bases near fireline if hot and likely to cause fire spread.
  - Identify hazard trees with flagging, glowsticks, or a lookout.
- When using indirect attack:
  - Do not fall snags on the intended unburned side of the constructed fireline unless they are an obvious safety hazard to crews.
  - Fall only those snags on the intended burn-out side of the line that would reach the fireline should they burn and fall over.

Mopup Phase

- Consider using "hot-spot" detection devices along perimeter (aerial or hand-held).
- Use extensive cold-trailing to detect hot areas.
- Cold-trail charred logs near fireline: do minimal scraping or tool scarring. Restrict spading to hot areas near fireline.
- Minimize bucking of logs to check for hot spots or extinguish fire: preferably roll the logs and extinguish the fire.
- When ground is cool return logs to original position after checking.
- Refrain from piling: burned/partially burned fuels that were moved should be arranged in natural positions as much as possible.
- Consider allowing larger logs near the fireline to burn out instead of bucking into manageable lengths. Use a lever, etc. to move large logs.
- Use gravity socks in stream sources and/or combination of water blivets and fold-a-tanks to minimize impacts to streams.
- Personnel should avoid using rehabilitated firelines as travel corridors whenever possible because of potential soil compaction and possible detrimental impacts to rehab work.
- Avoid use of non-native materials for sediment traps in streams.
- Aerial fuels (brush, small trees, and limbs): remove or limb only those fuels which if ignited have potential to spread fire outside the fireline.
- Burning trees and snags:
    - *Be particularly cautious when working near snags (*ensure adequate safety measures are communicated).
    - The first consideration is to allow a burning tree/snag to burn itself out or down.
    - Identify hazard trees with flagging , glow-sticks or a lookout.
    - If there is a serious threat of spreading firebrands, extinguish with water or dirt.
    - Consider felling by blasting, if available.

Aviation Management

Minimize the impacts of air operations by incorporating MIST in conjunction with the standard aviation risk assessment process.

- Possible aviation related impacts include:
    - Damage to soils and vegetation resulting from heavy vehicle traffic, noxious weed transport, and/or extensive modification of landing sites.
    - Impacts to soil, fish and wildlife habitat, and water quality from hazardous material spills.
    - Chemical contamination from use of retardant and foam agents.
    - Biological contamination to water sources, e.g., whirling disease.
    - Safety and noise issues associated with operations in proximity to populated areas, livestock interests, urban interface, and incident camps and staging areas.
- Helispot Planning
    - When planning for helispots determine the primary function of each helispot, e.g., crew transport or logistical support.
    - Consider using long-line remote hook in lieu of constructing a helispot.
    - Consult Resource Advisors in the selection and construction of helispots during incident planning.
    - Estimate the amount and type of use a helispot will receive and adapt features as needed.
- Balance aircraft size and efficiency against the impacts of helispot construction.
- Use natural openings as much as possible. If tree felling is necessary, avoid high visitor use locations unless the modifications can be rehabilitated. Fall, buck, and limb only what is necessary to achieve a safe and practical operating space.

Retardant, Foam, and Water Bucket Use

- Assess risks to sensitive watersheds from chemical retardants and foam. Communicate specific drop zones to air attack and pilots, including areas to be avoided.
- Fire managers should weigh use of retardant with the probability of success by unsupported ground force. Retardant may be considered for sensitive areas when benefits will exceed the overall impact. This decision must take into account values at risk and consequences of expanded fire response and impact on the land.
- Consider biological and/or chemical contamination impacts when transporting water.
- Limited water sources expended during aerial suppression efforts should be replaced. Consult Resource Advisors prior to extended water use beyond initial attack.

Logistics, Camp Sites, and Personal Conduct

- Consider impacts on present and future visitors.
- Provide portable toilets at areas where crews are staged.
- Good campsites are found, not made. If existing campsites are not available, select campsites not likely to be observed by visitors
- Select impact-resistant sites such as rocky or sandy soil, or openings within heavy timber. Avoid camping in meadows and along streams or shores.
- When there is a small group try to disperse use. In the case of larger camps: concentrate, mitigate, and rehabilitate.
- Lay out camp components carefully from the start. Define cooking, sleeping, latrine, and water supplies.
- Prepare bedding and campfire sites with minimal disturbance to vegetation and ground.
- Personal Sanitation:
    - Designate a common area for personnel to wash up. Provide fresh water and biodegradable soap.
    - Do not introduce soap, shampoo or other chemicals into waterways.
    - Dispose of wastewater at least 200 feet from water sources.
    - Toilet sites should be located a minimum of 200 feet from water sources. Holes should be dug 6-8 inches deep.
    - If more than 1 crew is camped at a site strongly consider portable toilets and remove waste.
- Store food so that it is not accessible to wildlife, away from camp and in animal resistant containers.
- Do not let garbage and food scraps accumulate in camp.
- Monitor travel routes for damage and mitigate by:
    - Dispersing on alternate routes or
    - Concentrating travel on one route and rehabilitate at end of use.
- If a campfire is built, leave no trace of it and avoid using rock rings. Use dead and down wood for the fire and scatter any unused firewood. Do not burn plastics or metal.

Restoration and Rehabilitation

- Firelines:
    - After fire spread has stopped and lines are secured, fill in deep and wide firelines and cup trenches and obliterate any berms.
    - Use waterbars to prevent erosion, or use woody material to act as sediment dams.

Maximum Waterbar Spacing	
Percent Grade	Maximum Spacing, Feet
< 9	400
10 – 15	200

Maximum Waterbar Spacing	
15 – 25	100
25 +	50

  - Ensure stumps are cut flush with ground.
  - Camouflage cut stumps by flush-cutting, chopping, covering, or using FLE to create more natural appearing stumps.
  - Any trees or large size brush cut during fireline construction should be scattered to appear natural.
  - Discourage the use of newly created firelines and trails by blocking with brush, limbs, poles, and logs in a naturally appearing arrangement.
- Camps:
  - Restore campsite to natural conditions.
  - Scatter fireplace rocks and charcoal from fire, cover fire ring with soil, and blend area with natural cover.
  - Pack out all garbage.
- General:
  - Remove all signs of human activity.
  - Restore helicopter landing sites.
  - Fill in and cover latrine sites.
- Walk through adjacent undisturbed areas and take a look at your rehab efforts to determine your success at returning the area to as natural a state as possible.

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Appendix J: Minimum Requirement/Tool Analysis for Maintenance of Existing Small Game Wildlife Water Developments in the North Jackson Mountains, North Black Rock Range, High Rock Lake, Pahute Peak, and Calico Mountains Wilderness Areas

Step 1- Determining the Minimum Requirement (a two-part process)

Part A. Minimum Requirement Key to making determinations on wilderness management proposals

(This flow chart will help you assess whether the project is the minimum required action for the administration of the area as wilderness. Answering these questions will determine ***if*** this proposed action really is the ***minimum required*** action in wilderness.)

Guiding Questions	Answers and explanations
1. Is this an emergency? (i.e. a situation that involves an inescapable urgency and temporary need for speed beyond that available by primitive means, such as fire suppression, health and safety of people, law enforcement efforts involving serious crime or fugitive pursuit, retrieval of the deceased or an immediate aircraft accident investigation) If Yes> Document the rationale for line officer approval using the minimum tool form and proceed with action. If No> Go to question 2	No
2.Does the project or activity conflict with the stated management goals, objectives and desired future conditions of applicable legislation, policy and management plans? If Yes> Do not proceed with the proposed project or activity. If No> Go to question 3	No
3. Are there any less intrusive actions that should be tried first? (i.e. signing, visitor education, or information) If yes> Implement other actions using the appropriate	No, for the developments to remain in a functioning condition periodic maintenance will need to occur.

process. If No> Go to question 4	
4. Can this project or activity be accomplished outside of wilderness and still achieve its objectives?(such as some group events) If Yes> Proceed with action outside of wilderness using the appropriate process. If No> Go to question 5	No, the developments were located in the wilderness areas at the time of designation, so maintenance will need to occur inside the wilderness boundaries.
5. Is this project or activity subject to valid existing rights? (such as mining claims or right of way easements) If Yes> Proceed to Minimum Tool Analysis If No> Go to question 6	No, the developments were built under a Cooperative Agreement with NDOW, but it is not considered a Valid Existing Right.
6. Is their special provisions in legislation (the Wilderness Act or Black Rock Act) that allows this project or activity? If Yes> the proposed project or activity should be considered but is not necessarily required just because it is mentioned in legislation. Go to part B If No> Go to Part B	No

Part B- Determining the Minimum Requirement

Responsive Questions for Minimum Requirement Analysis: Explain your answer in the response column. If your responses indicate potential adverse affects to wilderness character, evaluate whether or not you should proceed with the proposal. If you decide to proceed, begin developing plans to mitigate impacts, and complete a Minimum Tool Analysis. Some of the following questions may not apply to every project.

Effects on Wilderness Character	**Responses**
1. How does this project/activity benefit the wilderness as a whole as opposed to one resource?	The project does not necessarily benefit the wilderness as a whole, the maintenance of the existing projects will help maintain the existing populations and distributions of naturalized and native species.
2. If this project/activity were not completed, what would be the beneficial and detrimental effects to the wilderness resources?	Impacts to solitude associated with maintaining the existing developments would not occur if the activity did not occur.
3. How would the project or activity help ensure that the wilderness provides outstanding opportunities for solitude or a primitive and unconfined type of	The activity would have an impact on the solitude and naturalness of the areas. It would provide for continued

recreation? (e.g. does the project/activity contribute to the people's sense that they are in a remote place with opportunities for self-discovery, adventure, quietness, connection with nature, freedom, etc.)	recreation in the form of upland bird hunting.
4. How would the project/activity help ensure that human presence is kept to a minimum and that the area is affected primarily by the forces of nature rather than being manipulated by humans?	Maintenance of the developments would not ensure that human presence is kept to a minimum. The existing developments are a form of human manipulation.
Management Situation **5**. What does your management plan, policy, and legislation say to support proceeding with this project?	A Wilderness Management Plan has not been prepared for the Wilderness Areas. BLM Handbook 8560-1 Chapter III, Section 3 states " … water developments… necessary for fish and wildlife management (which were in existence before wilderness designation) may be permitted to remain in operation." Through the Resource Management Planning process it has been decided to retain the existing water developments.
6. How did you consider wilderness values over convenience, comfort, political, economic or commercial values while evaluating this project/activity?	Wilderness values were not the overriding values that were considered when deciding to retain the existing structures.
7. **Should We Proceed?**	**Yes** Go to step 2 (Minimum Tool Analysis)

Step 2 - Determining the Minimum Tool (the Minimum Tool Analysis)

These questions will assist you in determining the appropriate tool(s) to accomplish the project or proposed activity with the least impact to the wilderness resource.

Develop several alternate approaches to implementing the project or activity. At a minimum consider the following three alternatives.

Alt#1 An alternative using motorized equipment or mechanized transport	Alt#2 An alternative using non-motorized equipment or non-mechanized transport	Alt#3 Variations of methods1 and 2, as appropriate

Describe the alternatives. Be specific and provide detail.
-What is proposed?
-Why is it being proposed in this manner?
-Who is the proponent?
-When will the project take place?
-Where will the project take place?
-How will it be accomplished? (What methods and techniques)

Alt#1	Alt#2	Alt#3
Maintenance of 14 small game water developments (guzzlers). The existing developments consist of a 8'x12' catchment apron (fiberglass or aluminum), 4 steel angle iron uprights and crossbeams, a 320 gallon fiberglass tank, and a 12' x 14' barbed wire fence. The average distance that guzzlers are located from an open route is .7 miles. The furthest one is located 1.4 miles and the closest .07 miles from an open route. Under this Alternative guzzlers would be accessed, and materials hauled in by motorized vehicle (truck or quad) on existing routes. Guzzlers that are not located on existing routes would be maintained by helicopter. Motorized power tools and portable generators could be used. This method for maintaining the guzzlers would be the most efficient method and would allow several guzzlers to be maintained in short amount of time. The proponent is NDOW in conjunction with BLM. It is estimated that the guzzlers would need some form of maintenance about once every 5 years. Map 3-10 in Volume 2 of the FEIS shows the locations of the 14 guzzlers.	Same as Alternative 1, but all access would be non-motorized and non-mechanized, materials would be hauled to the guzzler sites on foot or horseback, and only non-motorized, or small battery operated handtools would be used.	Same as Alt 2, but helicopters could be used to sling in large items that would be difficult to pack on foot or horseback (such as the 320 gallon tanks). All other materials would be brought in on foot or horseback. It is estimated that helicopters would be used once every 10 years.

Utilize the following criteria to assess each alternative (a brief statement should suffice)

Biophysical effects

-Describe the environmental resource issues that would be affected by the proposed action.
-Describe any effects this action will have on protecting natural conditions within the regional landscape, (i.e. non-native insects and disease, or noxious weed control)
-Include both biological and physical effects.

Alt#1	Alt#2	Alt#3
Routes accessing several of the guzzlers would not be reclaimed and would continue to see occasional use for maintenance, this could lead to increased motorized trespass. The routes would also continue to impact the naturalness of the areas. The probability of introducing noxious weeds into the area may also be increased by using motor vehicles to access the guzzlers.	Existing routes would be reclaimed and very little impact to naturalness would occur from the maintenance activities.	Same as Alt 2

Social/recreation/experiential effects

-Describe how the wilderness experience may be affected by the proposed action
-Include effects on recreation use and wilderness character
-Consider the effect the proposal may have on the public and their opportunity for discovery, surprise and self-discovery

Alt#1	Alt#2	Alt#3
Impacts to solitude and the wilderness experience would be greatest under this alternative. Using motorized equipment for access and maintenance would increase the likelihood of being heard and seen by wilderness users.	Impacts from the maintenance activities would have very little impact on solitude and the wilderness experience.	Impacts from the maintenance activities would have very little impact on solitude and the wilderness experience.

Societal/political effects

-Describe any political considerations, such as MOUs, agency agreements, local positions that may be affected by the proposed action.
-Describe relationship of method to applicable laws

Alt#1	Alt#2	Alt#3
The Cooperative Agreements that authorized the guzzlers outlined that NDOW would cover the costs of	Same as Alt 1	Same as Alt 1

maintenance, but did not outline how it would be accomplished. There was also considerable public comments received that supported maintaining the existing guzzlers.		

Health and safety concerns

-Describe and consider any health and safety concerns associated with the proposed action. Consider the types of tools used, training, certifications and other administrative needs to ensure a safe work environment for employees. Also consider the effect the proposal may have on the health and safety of the public.

Alt#1	Alt#2	Alt#3
No special health and safety concerns	Same as Alt 1	Same as Alt 1

Economic and timing considerations

-Describe the costs and timing associated with implementing each alternative

-Assess the urgency and potential cumulative effect from this proposal and similar actions

Alt#1	Alt#2	Alt#3
This alternative would take the least amount of time to accomplish the maintenance, but would probably be the most costly due to the use of the helicopter. Cumulative effects could include the continued motorized trespass that may occur due to the routes not being reclaimed.	This alternative would take the longest amount of time to accomplish the maintenance, but could cost less, because a helicopter would not be used.	Similar to Alt 1, but costs would probably be lower because of the less frequent use of the helicopter. Cumulative impacts associated with Alt 1 would not occur.

Formulate a preferred alternative from the above alternatives and describe in detail below

Access to the 14 existing guzzlers would be by foot or horseback, materials would be hauled to the guzzler sites on foot or horseback, and only non-motorized, or small battery operated handtools would be used to conduct the maintenance.

Helicopters could be used to sling in large items that would be difficult to pack on foot or horseback (such as the 320 gallon tanks). All other materials (fencing, angle iron, and apron material) will be brought in on foot or horseback. It is estimated that helicopters would be used once every 10 years for guzzler maintenance.

Further refine the alternative to minimize impacts to wilderness

-*What will be the specific operating requirements?*

NDOW will coordinate the occasional use of helicopters for guzzler maintenance with BLM. NDOW will contact the BLM by phone or letter at least 5 business days prior to helicopter use.

-*What are the maintenance requirements?*

As outlined in the Cooperative Agreements:

- Maintenance of the guzzler will be limited to normal upkeep and repair of the catchment, tank, lid, and ramp as necessary to maintain proper function of the unit
- Maintenance of the exclosure fence will be limited to normal upkeep and repair that will be necessary to maintain the integrity of the exclosure to keep livestock and/or wild horse/burros out.

-*What standards and designs will apply?*

Guzzlers aprons will match the color of the surrounding vegetation and soils to minimize visual impacts.

-*Develop and describe any mitigation measures that apply?*

Maintenance operations will be scheduled to avoid high visitor use periods. Inspection of projects would be completed regularly to minimize the amount of maintenance and reconstruction required. BLM and NDOW will seek the assistance of volunteer wilderness and wildlife groups to assist in the added workload of accomplishing guzzler maintenance primarily by non-motorized and non-mechanized means.

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Appendix K: Visual Resource Management Class Descriptions

The Visual Resource Management process is divided into two stages- inventory and analysis. Inventory is the stage associated with Resource Management Planning, while the analysis stage is used primarily to determine if proposed actions are appropriate to a visual resource management class assigned through a resource management plan.

The inventory stage involves identifying the visual resources of an area and assigning them to inventory classes using BLM's visual resource inventory process. The process involves rating the visual appeal of a tract of land, measuring public concern for scenic quality, and determining whether the tract of land is visible from travel routes or observation points. The process is described in detail in BLM Handbook H-8410-1, Visual Resource Inventory. The results of the visual resource inventory become an important component of BLM's Resource Management Plan (RMP) for the area. Visual values are considered throughout the RMP process, and the area's visual resources are then assigned to the following management classes:

- **Class I -** To preserve the existing character of the landscape. This class provides for natural ecological changes; however, it does not preclude very limited management activity. The level of change to the characteristic landscape should be very low and must not attract attention.

- **Class II -** To retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.

- **Class III -** To partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

- **Class IV -** To provide for management activities that require major modification of the existing character of the landscape. The level of change to the characteristic landscape can be high. These management activities may dominate the view and be the major focus of viewer attention. However, every attempt should be made to minimize the impact of these activities through careful location, mini-mal disturbance and repeating the basic landscape elements.

The analysis stage involves determining whether the potential visual impacts from proposed surface-disturbing activities or developments will meet the management objectives established for the area, or whether design adjustments will be required. A visual contrast rating process is used for this analysis, which involves comparing the project features with the major features in the existing landscape using the basic design elements of form, line, color, and texture. This process is described in BLM Handbook H-8431-1, Visual Resource Contrast Rating. The analysis can then be used as a guide for resolving visual impacts. Once every attempt is made to reduce visual impacts, BLM managers can decide whether to accept or deny project proposals. Managers also have the option of attaching additional mitigation stipulations to bring the proposal into compliance.

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Appendix L: Management Zone Descriptions

The NCA will be subdivided into three management zones, the Front Country Zone, the Rustic Zone, and the Wilderness Zone. Zones are designations that represent landscapes, visitor use patterns, and management philosophy. Managers use zones to establish criteria to provide guidance on how best to meet management objectives. The establishment of zones considers patterns of visitor use, visitor expectations, and resource characteristics and sensitivity. Within a zone, varying management techniques are prescribed to insure the conservation, protection, and enhancement of resources, as well as traditionally public uses. Zoning as a management tool assists BLM in the plan implementation process by setting a framework within which day to day management decisions are made. Certain actions may be appropriate in one zone, but unacceptable in another zone. Stipulations for the issuance of Special Recreation Permits, or the management of dispersed recreation, could be based upon zone boundaries and management criteria. Zones will benefit resource management by providing guidance for broad geographical areas. This guidance will cover both visitor use and resource protection.

Front Country Zone

The Front Country Zone corresponds to the drivable playa of the Black Rock Desert and portions of the associated dune areas that receive high levels of visitor use. Small areas near Steven's Camp and in the Soldier Meadows area are also be included because of existing high levels of visitor use or the presence of structures. This zone will likely receive most of the visitor use and will represent the area where most large commercial permits will be issued. Likewise, this area represents the zone where other BLM management actions including necessary on-site visitor services will likely be most noticeable. Subject to area and route designations, access to and within the zone will generally not be limited to any type of vehicle.

Visitor Experience

Visitors to the Front Country Zone will almost certainly encounter other visitors throughout the peak season, but will still find solitude during off-season periods. Opportunities to affiliate with other users in primitive campgrounds or undeveloped sites will be available, although subtle, evidence of BLM management will be noticeable. Self-reliance will only be of moderate importance, with relatively low levels of challenge and risk. Visitors to these areas will only need to make a short time commitment with short drive times and no need to stay overnight. Access for people with disabilities will be difficult and challenging.

Resource Condition or Character

The probability of encountering BLM staff in the Front Country Zone will be high. Visitors, sites, vehicle travel, and evidence of BLM activity will be managed to ensure resource protection and public safety. On-site controls such as vehicle barriers, educational outreach, and delineated use areas will be most evident in this zone. This zone will be primarily natural, but sights and sounds of other users and BLM resource management activity could be evident, especially on the playa during high use periods. Where visitor uses impact resources, the response will typically be to confine visitor uses to specific sites within the area, hardening drivable areas and restricting use on restored sites.

Appropriate Activities or Facilities

This zone will be comprised of heavily visited areas, developed areas, and heavily visited attraction sites such as Stevens Camp and the Soldier Meadows Hot Spring Complex. The Front Country zone will be accessible by conventional motorized vehicles including sedans, trailers, RVs and some motor homes. Large group sites could be available throughout this zone. Primitive campgrounds may be used to concentrate uses in appropriate locations and minimize impacts to sensitive resources. Interpretation and educational opportunities will be emphasized in this zone, but on-site developments will be minimized where other outreach techniques prove

effective. Informational signage may be used to explain resource management or points of interest. . Occasional sanitary facilities could be located in the Front Country zone to protect user health and for natural and visual resource protection. Access for people with disabilities will generally be difficult and challenging, but some developed areas will be accessible. Large scale permitted activities will be concentrated in the playa portions of this zone

The Rustic Zone

The Rustic Zone will include non-wilderness portions of the NCA where low levels of visitor use occur. Visitor use in the Rustic zone will be limited by the quality of roads and will require visitors to be experienced in off road travel. The zone will accommodate low to moderate levels of use, including groups, but visitors could expect to encounter few people, no services, primitive roads and few camping areas. Overnight camping locations near attraction areas could be limited to afford solitude and minimize resource impacts. Resource management projects will be minimally noticeable and designed to blend into the natural character of the area.

Visitor Experience

The Rustic zone designation will provide a sense of immersion in the natural environment, and will be away from cabins, equestrian facilities, and high quality roads. Though visitors to the Rustic Zone will have a high probability of experiencing solitude, closeness to nature, and tranquility, human contact could be expected during peak seasons. Opportunities to experience a high degree of challenge and risk will be available for visitors using motorized or non-motorized equipment. Visitors using this area will need to make a moderate time commitment, which will require longer drive times or overnight stays. Access for people with disabilities will be difficult and challenging. Minimum on-site controls and/or restrictions may be present but will be subtle. The probability of encountering BLM staff or evidence of BLM management will be low.

Resource Condition or Character

There will be a low probability of encountering BLM staff, even during times of peak visitation. BLM resource management activity and visitor services will be essentially unnoticeable. Minimum on site controls to manage OHV and camping uses may be present, but will be subtle. This zone will be predominately natural, and the sights and sounds of other users will be minimal. Where visitor uses impact resources, the response will generally be to close the sites to allow active or passive restoration.

Appropriate Facilities and Activities

The Rustic zone will be comprised of low or moderately visited areas adjacent to heavily visited areas. Most areas along the emigrant trails and some popular hot spring destinations will also be within the Rustic Zone. Some areas in the Rustic Zone will serve as portals to wilderness areas, and the Rustic Zone will include Wilderness access routes and wilderness boundary roads. Travel throughout the Rustic Zone will occur on primitive roads and trails where high-clearance vehicles will be needed, and 4WD will be necessary in some areas. Group sites will be available near attraction areas and at some appropriate locations along the emigrant trails. Where damage is occurring to resources, designated campsites or other means could be used to disperse uses. Rustic and rudimentary facilities will be used primarily for site protection. If fencing were required it will be designed to blend into the natural environment. Interpretation and educational outreach will be emphasized off-site or through other mediums that do not require developed facilities. In cases where other outreach mediums are not effective in preventing resource impacts, small site identification, directional signage, or interpretive signs that are sensitive to zone character may be used. Temporary informational signage could be used to explain projects or new restrictions. Abandoned facilities will only be maintained if they provide interpretive opportunities or if the properties are eligible for the National Register of Historic Places.

Occasional sanitary facilities may be located to protect user health and for the protection of natural and visual resources. Class I and II special recreation permits may occur in the Rustic Zone.

The Wilderness Zone

The Wilderness Zone includes the areas that are Federally designated Wilderness as well as the Lahontan Cutthroat Trout (LCT) Area. The Wilderness Zone will offer the greatest opportunity to experience solitude and self-discovery. Contact with other visitors will be minimal in this zone and any sign of BLM resource management activity will be essentially unnoticeable.

Visitor Experience

Visitors to the Wilderness Zone will have a low probability of encountering other visitors and excellent opportunities to experience solitude, freedom, closeness to nature, and tranquility. To experience much of this zone visitors will have to make a moderate time commitment, which will require long travel times and overnight stays. The environment will offer a high degree of challenge and risk. Access to people with disabilities will be most difficult and very challenging

Resource Condition or Character

The probability of encountering BLM staff or evidence of BLM management will be low. Restrictions and management controls will not be evident after entry. Excellent opportunities for dispersed camping will be available throughout the zone. This zone will remain the most natural of the management zones. Sights and sounds of other users will be minimal and in general will only be expected adjacent to or near wilderness access or boundary routes.

Appropriate Facilities and Activities

This zone is comprised of large, sparsely visited areas, including federally designated Wilderness and un-roaded portions of the Lahontan Cutthroat Trout ISA. Travel through this zone will be by foot and horseback only. No on-site interpretive or educational development will be used. No facilities will be developed or maintained for user comfort. Abandoned facilities will only be maintained if they have been determined eligible for the National Register of Historic Places. Only Class I special recreation permits will occur in the Wilderness Zone.

Management Zone Description Table

Category	Zone		
	Frontcountry	**Rustic**	**Wilderness**
Visitor Management			
Camping	Vehicle camping will be limited to designated sites at Stevens Camp, Massacre Ranch, Soldier Meadows, and playa dunes and hummocks. Dispersed Camping allowed one-half mile from a designated site on the playa. Primitive campgrounds may be developed to concentrate use.	Dispersed camping allowed one half mile from designated sites. Vehicle camping will be limited to Designated sites in High Rock Canyon, roaded portions of the LCT area, along Class A and B historic Trails and within playa dunes and hummocks.	Dispersed camping allowed one-half mile from designated sites.
Management Controls	Most evident in this zone. Information facilities more likely at entry points to the NCA and near existing facilities within the Frontcountry Zone.	Present at minimum necessary and subtle. Limited Information Facilities	None evident after entry. No onsite controls or information facilities.
Group Size and Length of Stay Limitations	May be imposed if adverse impacts occur.	May be imposed if adverse impacts occur.	May be imposed if adverse impacts occur.
Campfires	Allowed only in established fire rings and in fire pans on the playa. No collection of green and standing wood	Campfires not restricted, but firepans are encouraged. No collection of green and standing wood.	Campfires not restricted, but firepans are encouraged No collection of green and standing wood.
Facilities			
Buildings, Cabins, Horse corrals, Etc.	Maintained for public use (Includes Steven's Camp, Massacre Ranch, Soldier Meadows)	Maintained only when they provide interpretive opportunities or are	Maintained only when they provide interpretive opportunities or are

Category	Zone		
	Frontcountry	**Rustic**	**Wilderness**
	May develop campsites including: hardened tent pads, fire rings, tables, potable water, etc.	eligible for the National Register of Historic Places. Option to provide minimal facilities such as fire rings or hardened tent pads to define designated camping areas.	eligible for the National Register of Historic Places
Sanitary Facilities	Provide adequate sanitation facilities at selected locations.	Provided only where essential for resource protection.	None allowed
Public Outreach and Interpretation			
Outreach and Interpretation	Concentrate developments at boundaries/portals to the NCA or where existing structures are located. Low profile signs at limited number of trail and other resource sites. Interpretive trails and self guided tours with minimal (small marker) on-site development. Scenic overlook with interpretive materials located near periphery of NCA. On-site interpretive panels, kiosks and public educations programs.	Emphasize off-site methods such as literature and self-guided trails, provide minimal signs/kiosks in areas experiencing Adverse resource impacts.	No on-site methods allowed except when required to protect resources.
Special Use Permits			
Special Recreation Permits	Class I and II permitted throughout the zone. Class I,II, III, and IV	Class I and II permitted Throughout the zone. Class III emigrant trail	Class I events only. (outfitters/guides) No competitive events

Category	Zone		
	Frontcountry	**Rustic**	**Wilderness**
	allowed within the permit area of the playa.	Tours permitted when consistent with the objectives for historic trails.	permitted.
Film Permits	Class I and II activities permitted throughout the zone. Class I,II, III, and IV allowed within the permit area of the playa.	Class I and II activities Permitted throughout the zone.	Class I permits only.
Public Access and Transportation			
Accessibility	All vehicle types	High clearance and some need for Four Wheel Drive	Horse and foot travel only
Road Maintenance	Maintained to provide access to front country sites.	Spot Fixes to retain traditional access.	No road maintenance – Vehicle routes will be restored to natural conditions
Trails	Non-motorized or motorized trails may be constructed, closed, or relocated if human use results in adverse impacts. Non-motorized trails could be developed to separate different user specific times and locations could be designated for certain modes of travel. (ie. horseback vs. hiking) The Desert Trail will be extended through portions of this zone.	Non-motorized trails may be constructed, closed, or relocated if human use results in adverse impacts. Non-motorized trails could be developed to Separate different user types or specific times and locations could be designated for certain modes of travel. (ie. horseback vs. hiking) The Desert Trail will be extended through portions of this zone.	Foot and Horse trails may be constructed, closed, or relocated if human use results in adverse impacts. Non-motorized trails could be developed to separate different user specific times and locations could be designated for certain modes of travel. (ie. horseback vs. hiking) The Desert Trail will be extended through portions of this zone.
Physical Setting	Visible evidence of human uses including buildings and facilities.	Natural appearing Landscape with primitive roads.	Natural landscape with little evidence of human alteration to the landscape.
Remoteness	Likely to experience sights and sounds of	Distant sights and sounds of other	Generally out of sight and sound of other

Category	Zone		
	Frontcountry	**Rustic**	**Wilderness**
	other visitors.	visitors.	visitors.
Social Setting	Contact with other users will be common	Little contact with other visitors.	Little or no contact with other visitors.

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Appendix M: Permit Classification System

Classification of Permits

Special Recreation and other land use permit proposals will be assigned to one of four permit classes (Class I-IV) based on several evaluation factors as shown in the table below. The permit classification matrix shows the permit classes and their relationship to the evaluation factors. Permits will generally be assigned to the class where the majority of the evaluation factors rate. However, high ratings for some factors may shift the permit class to a higher class based on anticipated needs for resource protection, administrative, or public safety resources. The evaluation factors shown below the table may be modified in the future following evaluation of the classification system.

Classification of
Black Rock-High Rock NCA Permits
(Special Recreation Permits, Film Permits and other temporary Land Use Permits)

Evaluation Factors		Permit Class			
		I	II	III	IV
Size		Small	Small/Medium	Medium	Large
Time		Trivial	Trivial/Short	Short	Long
Buffer Size		None	None	Medium	High
Environmental Effects		Trivial	Trivial	Low	Other
Anticipated Numbers	**Users**	Low	Low/Medium	Medium	High
	Vehicles	N/A	Low	Medium	High
Oversight		None	None/Low	Low	High
Mechanical Equipment		N	N or Y	Y	Y
Examples		NOLS, wilderness outfitting	Outfitting, small tours, land sailing, film permits	Golf tournament, most rocket events, large tours	Large Rocket launches, Land speed trials, Burning Man

Evaluation Factors:

Size of the area under exclusive use by the applicant.

Small	< 1 acre
Medium	1 acre to 100 acres

Large	> 100 acres

Time period for exclusive use by the applicant.

Trivial	one day or less
Short	two to six days
Long	one week or greater

Buffer Size needed to protect other users from potential effects

None	no buffer required
Small	< 0.25 mile buffer
Large	> 0.25 mile buffer

Potential **Environmental Effects**

Trivial	Effects of a temporary nature and surface disturbance less than 0.1 acres
Low	Effects of a temporary nature and surface disturbance less than 0.5 acres
Other	Effects longer than one year or surface disturbance greater than 0.5 acre

Anticipated numbers of participants or vehicles (whichever has the greatest potential impact)

	Participants	Vehicles
Low	<50	<30
Medium	51 to 1000	31 to 50
High	> 1000	>50

Oversight requirements (includes cleanup inspections, LE activities)

None	No post permit compliance actions required
Low	Post permit activities require < 4 hours of BLM oversight
High	Post permit activities require > 4 hours of BLM oversight

Mechanical Equipment Required?

Y	Vehicles or other mechanical equipment required.
N	No vehicles or other mechanical equipment required.